

# Dun's Review, International Edition

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## DUN'S INTERNATIONAL REVIEW

is also published monthly in SPANISH, making twenty-four issues in the two languages per year.

The attention of every reader of the paper is particularly directed to the *BUYER'S GUIDE* on pages 3, 4, 6, 8, 10, 12, 13 and 14 and to the *ALPHABETICAL INDEX* of Advertisers on page 15. At the present time buyers in every part of the world are no doubt interested in establishing new connections for the purchase of lines cut off by the European war and it is recommended that this Buyer's Guide be retained for reference as it contains a classified list of several hundred articles, together with the names of manufacturers or exporters from whom they may be obtained.

Correspondence regarding any topic of international trade interest is invited from readers of the Review and contributions on such subjects, if available for publication, will be paid for at space rates. Photographs of commercial scenes will be purchased, if suitable for reproduction. Manuscripts and photographs not used will be returned promptly if postage is sent for that purpose.

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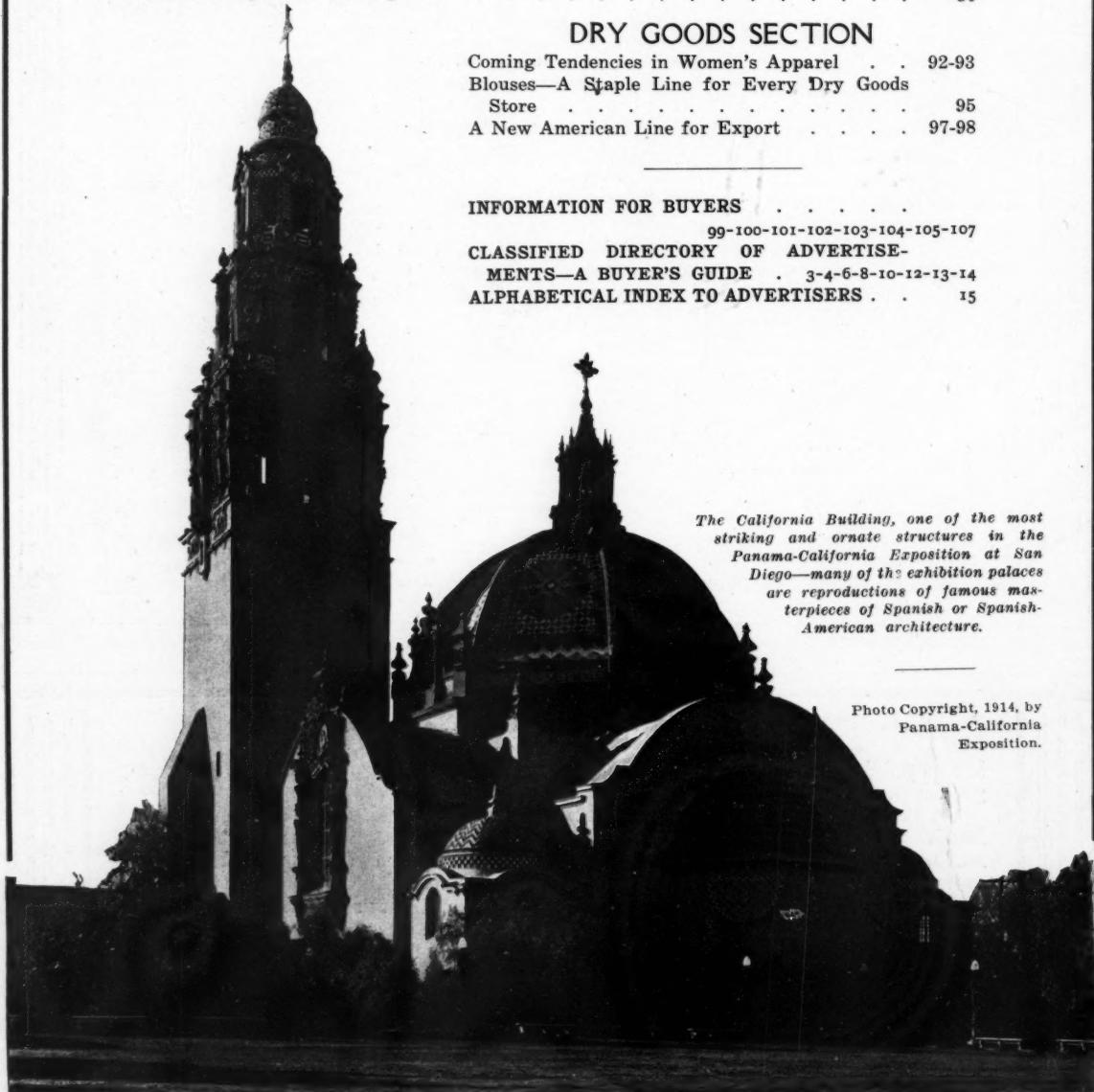
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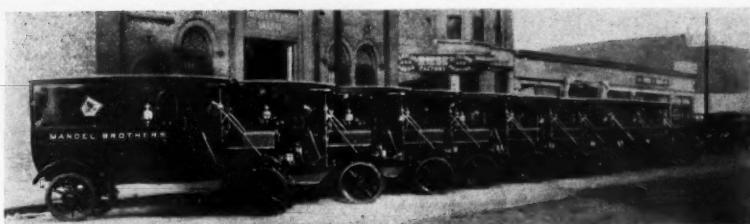
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*The California Building, one of the most striking and ornate structures in the Panama-California Exposition at San Diego—many of the exhibition palaces are reproductions of famous masterpieces of Spanish or Spanish-American architecture.*

Photo Copyright, 1914, by  
Panama-California  
Exposition.



*For department stores a fleet of motor delivery cars is a modern necessity  
Waverley electrics used for city deliveries*

## THE DAWN OF THE GREATEST MOTOR TRUCK ERA EVER KNOWN

**War's Destruction of Auto Vehicles and their Commercial Necessity  
Causing an Unprecedented Expansion of the Industry in America**

THE effects of the great changes now taking place in the world's automobile trade are likely to be felt for many years. Not only manufacturers, but agents and dealers everywhere must prepare to meet the new conditions that have arisen from the wholesale destruction of motor vehicles and the disorganization of the industry in Europe owing to the war.

At the outbreak of hostilities practically all privately owned automobiles—particularly motor trucks and other commercial vehicles—were requisitioned for military use. The life of an automobile along the firing lines is said to be about ten days. As soon as anything happens to a machine it is abandoned forthwith. It lies where it fell until the debris of combat is cleared away.

One of the first things which became plain as the war progressed was that the motor production of the belligerent countries had ceased so far as the commercial output was concerned, and that this condition would continue throughout the struggle. Automobile makers in Europe have had to do their utmost toward supplying the needs of the armies. This has proved to be an automobile war to a degree hitherto undreamed of.

This condition has left the neutral markets of the world dependent on American manufacturers for their supplies of motor vehicles and accessories. That the United States must continue to furnish their requirements for some time to come is becoming more and more apparent. The supplying of motor vehicles, chiefly trucks, to the warring nations has also reached large proportions. Exact details as to these shipments have not been made public, but the most trustworthy statistics indicate that prior to January 1 motor trucks to the number of 4,500, in round figures, and

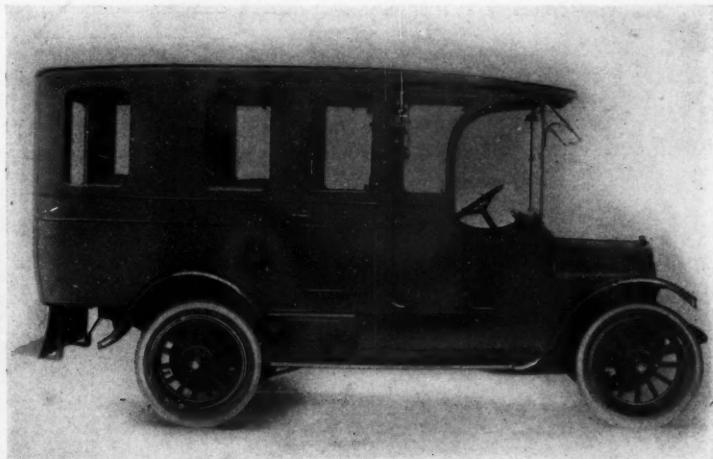
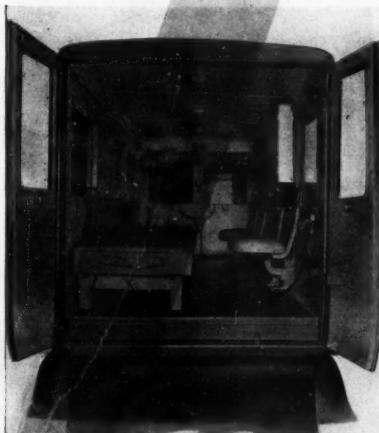
to the value of about \$13,000,000, had been sold to the countries at war.

When the conflict is ended the surviving business concerns and individuals that formerly were users of motor trucks will at once be in the market for a replacement of their facilities according to the means that they have at their command. The large and steadily increasing demand from other parts of the world will also have to be met. As the quality and price of the American product have proved satisfactory in every market, agents and dealers should hasten to establish connections with concerns in the United States whose commercial cars are best adapted to their local requirements.

It is no longer necessary to argue about the economies and advantages of motor transportation. They have been proved so thoroughly that anyone who ever has used a mechanically propelled vehicle never will return willingly to the horse-drawn kind. There is hardly a line of business or industry whose merchandise or products cannot be handled far more quickly and cheaply by a motor vehicle than in any other way. Competition cannot be met by any other means.

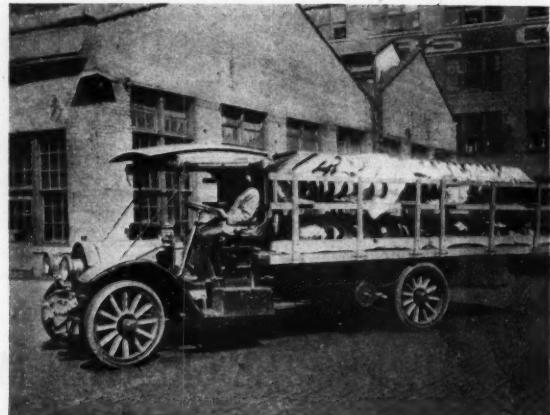
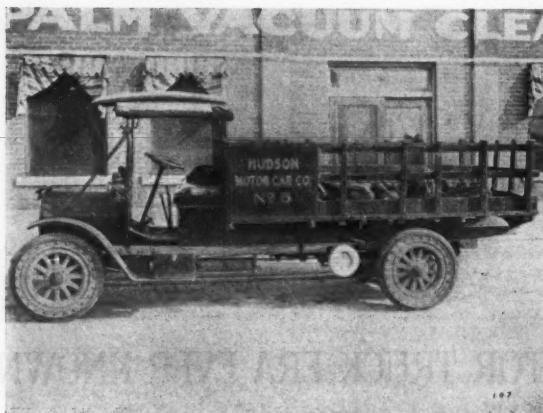
It was as inevitable that the motor delivery wagon should supersede the horse-drawn wagon as it was that the stage coach should give way to the railroad, and the sailing vessel to the steamship. The motor wagon is capable of indefinitely sustained speed two or three times that of any other vehicle having the same free movement on public streets and roads. It is no longer necessary to experiment with motor trucks or delivery wagons in order to find whether or not they can be used successfully in any given business. The experimenting has already been done, and

*There is almost no limit to the utility of a motor truck—these pictures show a Willys-Overland ambulance*



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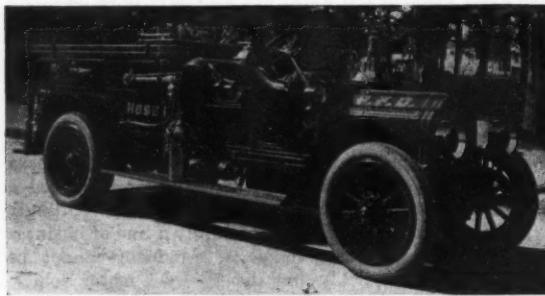
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*Automobile manufacturers are discriminating buyers of motor trucks—these are Federal trucks owned by the Hudson Motor Car Company and Studebaker Corporation*

most well-established manufacturers of these vehicles in the United States can give carefully kept records of the cost of operation and maintenance of their machines in many different lines of trade, as well as corresponding figures for horse service.

These figures show that in most lines of work the motor



*The motor is replacing horses for fire department vehicles—a Garford hose truck*

wagon is capable of doing the work of from three to four horse-drawn vehicles of equal load and capacity if it is operated under proper conditions.

Motor trucks are used successfully in so many different lines of business that all of them cannot be enumerated here. According to the Secretary of the Commercial

*For hauling heavy materials like coal the motor truck is ideal—this is a five-ton Garford*

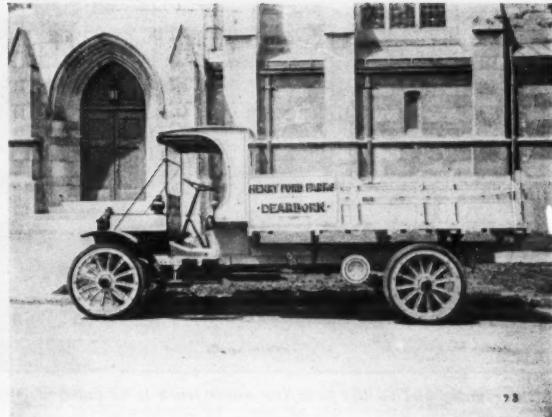


Vehicle Committee of the National Association of Automobile Manufacturers of the United States, one leading American truck manufacturing company has a list of 187 trades that are using its vehicles. A tabulation of the cars of about 7,500 business and industrial concerns whose officers attended the New York and Chicago national motor truck shows a year ago enumerated 225 distinct lines of business that were investigating and buying commercial motor vehicles. The trades most numerously represented were, in the order of number: building and contracting; metal and hardware; grocery; machinery and tool trades; light, heat and power companies; dry goods and clothing; furniture, beds and bedding; carpets, rugs and house furnishing; brewing and liquor; expressing and teaming; coal and wood; printing and publishing; city governments; lumber trades; textile and dyeing; paints, oils and decorating; heating, plumbing, ventilating and steam fitting; department stores; storage and moving; produce and commission; steam railroads and equipment; paper and paper boxes; meat and meat packing; boots, shoes, hats, gloves and men's furnishing.

There is hardly a line of business of any importance, dependent on hauling or delivering, that is not to-day using the motor wagon to some extent. It has invaded the last proverbial strongholds of the horse and mule—the battlefield and the farm. Gasoline-driven trucks and tractors are plowing and cultivating farms in many parts of the western United States, in western Canada, South America,

*Another Garford truck handling baled hay and grain—a platform type of body is here shown*





*Two more automobile manufacturers who are using Federal trucks for heavy hauling—the Briggs-Detroiter Company, and Henry Ford, the head of the Ford Motor Company*

Europe, Australia and India. Some dealers in hay, grain and feed for horses are using motor trucks.

The adaptability of the motor truck is one of its most striking characteristics. Many manufacturers, whether of gasoline or electric vehicles, produce a chassis or running gear that is an independent operative unit on which any desired style of body can be mounted. Thus a single design may be used for such diversified purposes as a combination chemical and hose-wagon for fire department work, a police patrol, hospital ambulance, contractor's dump truck, florist's car, coal truck, piano truck, art dealer's truck, oil tank car, street sprinkler, sight-seeing stage and many other purposes.

In many places, both city and country, the co-operative purchase and use of motor trucks has been highly successful. A typical instance will illustrate the possibilities in this line, both for the motor truck agent or dealer and the purchasers.

About fifty farmers, none of whom felt able to afford a motor truck for his individual use, decided to club together and purchase four auto trucks to deliver their produce to the nearest railroad markets which singly they had not been able to reach at a profit. The investment of each was small and the benefits that resulted were very large.

One of these farmers, for instance, had some chickens, eggs and butter that he wished to sell. Before the purchase of the co-operative motor trucks he would have had to hitch up a horse and take his produce to the readiest market, some ten miles away. The time consumed by the trip and the upkeep of the horse-drawn equipment consumed all the

profit. By using a motor truck in which he had an interest, the cost of transportation was reduced to a minimum. His shipment was only a part of the load. The transportation charge in this instance was 9 per cent. of the selling price of the shipment. In other cases it is as low as 5 per cent. This pays for the upkeep of the truck, as to gasoline and

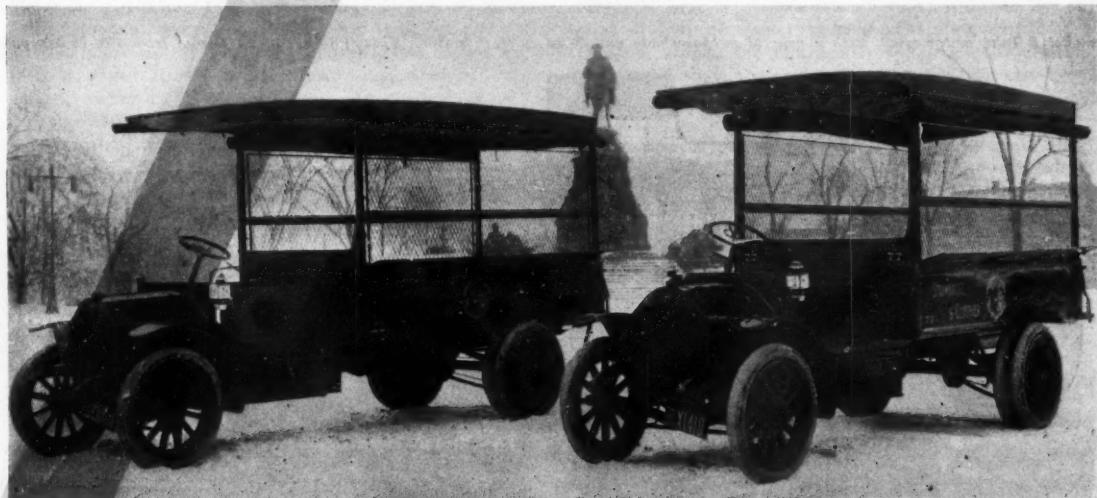


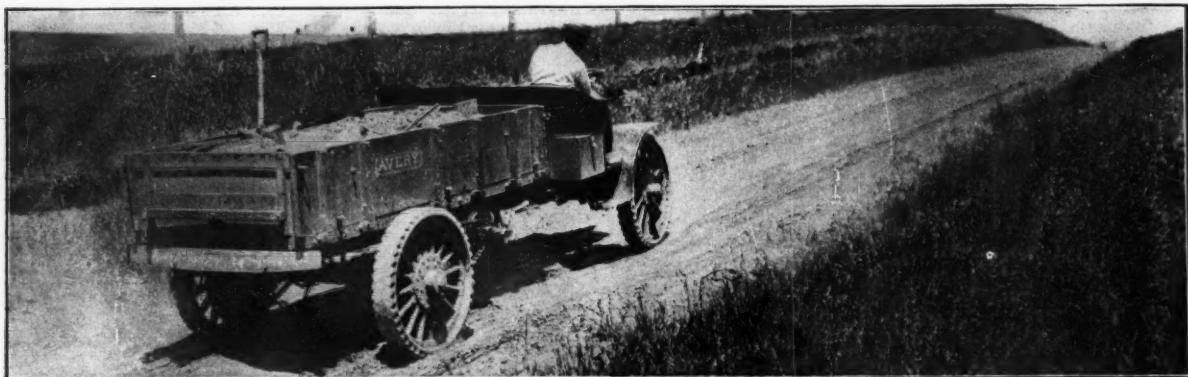
*A Signal truck used by a grocery company—a line that uses light delivery cars also*

tires, and for the hire of competent and intelligent drivers as well.

In operations of this sort the motor trucks should be worked under load as much as possible by allowing them to bring out from town such articles as the shippers may desire, in addition to making deliveries. In this way the idle mileage is reduced.

*Two of a fleet of 3/4-ton Willys Utility Trucks used by a leading Philadelphia department store—these trucks have screened bodies*





*In the country and on the farm the motor truck is as indispensable as in the city—a three-ton type A Avery truck with wood plug tires*

Similar methods have been used with great success in cities and small towns. Retail merchants form a partnership or small stock company for the purchase of one or more motor trucks or light delivery auto vehicles and use them co-operatively for bringing their supplies from warehouses or wholesale markets and for delivering goods to their customers.

The field for the sale of motor trucks and other commercial vehicles holds great possibilities everywhere. Even in such a country as the United States, where there are more than 300 different manufacturers of motor trucks, there are only about 70,000 of these vehicles in use. It should be borne in mind, however, that the motor truck industry is but eight years old and that it is expanding at a tremendous rate.

At a recent motor truck convention in Detroit, Michigan—the chief center of the automobile industry—one of the speakers on this subject said in part:

"Prior to the introduction of the parcel post the Interstate Commerce Commission compiled figures on merchandise transportation. From these government statistics it has been deduced that of the total volume of transportation in the United States, the steamships and railroads combined handle but 15 per cent., leaving the other 85 per cent. to be moved by horse and wagon or motor-driven vehicles.

"A realization of how little inroad the truck has already made may be had from some further figures. From 1908 until the present time, inclusive, there have been produced in the United States, approximately, 180,000 commercial vehicles. About five-sevenths of these are probably now in use. On the average, counting vehicles of all sizes, these do not displace more than three horses each, or not more than 375,000 animals in all. When this is compared with the total number of horses and draft animals in use—26,000,000—it is found that commercial cars in reality have

displaced less than 1½ per cent., and even taking into consideration the motor-driven farm tractor, the possible field still not covered is fully 98 per cent."

For purposes of distinction the speaker classed all motor haulage as either "transfer" or "delivery," and said:

"By transfer is meant the movement of maximum loads from one point directly to a destination without lessening the load, such as the transfer from farms or factories to railroads or steamships, from mines to smelters, from stores to distributing points, etc. This class of haulage has been developed by the large truck to a high state of efficiency, but the average of this class of load has been shown to be in the neighborhood of but 4,500 pounds.

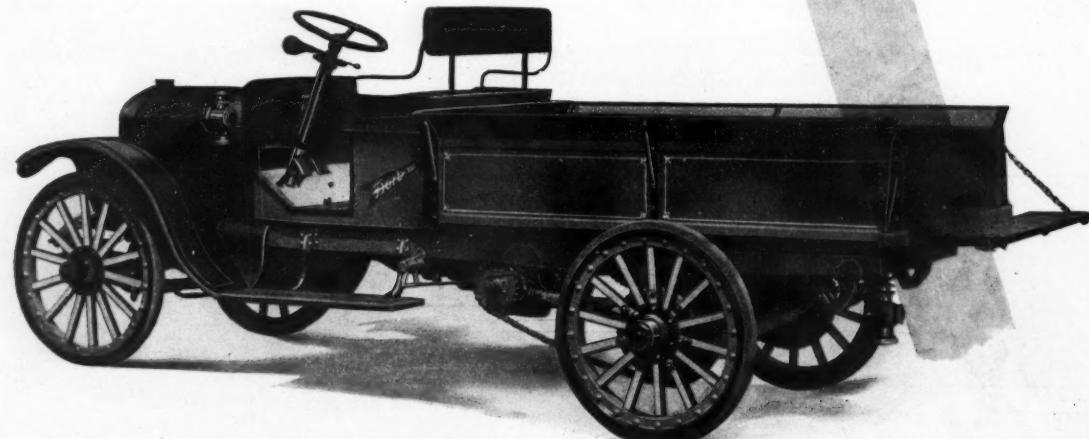
"By delivery is meant the distribution of goods to numerous consignees, in which case there is an ever-diminishing load upon the vehicle, and almost at no time does it carry its maximum. This is the field for the medium or small-sized truck and embraces from 75 to 80 per cent. by volume of all merchandise transportation.

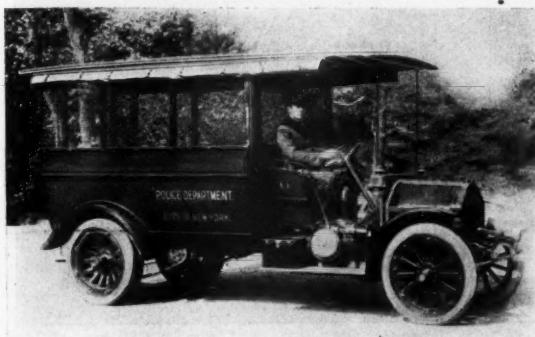
"Transfer includes the raw product, while delivery concerns itself usually with the finished product. The total tonnage handled is practically the same, but the volume is vastly greater, the finished product as a rule occupying many times the space of the raw material. This necessitates a large number of delivery vehicles of large volume but small load capacity, as compared to those required to handle the finished product."

The proportion of the total haulage that comes within the field of the medium and small truck is variously estimated at from 75 to 80 per cent.

A study of the weight of vehicles and their loads of a large department store of Philadelphia showed that even during the rush hour period the maximum load on the 3,000-pound trucks was but 1,195 pounds, and that the average was not more than 900. Similar studies of a large candy store in New York City showed that the non-paying

*A model B Dart motor truck with a general purpose body and 25 to 30 H. P. motor. This style has a capacity of from 1500 to 2000 pounds*





*Many police departments are now using motor trucks—a 3/4-ton Willys Utility Truck owned by the City of New York*

load—which included the weight of the vehicle—during the rush period was nearly 75 per cent.

Arguing from these premises, the speaker concluded that in many instances the merchant having deliveries of this nature to make should bear in mind that a light vehicle making frequent trips might come nearer to solving his distribution problems than a heavily loaded one that went to and fro at longer intervals.

The motor truck agent or dealer, however, can solve for his customer in each case, in general terms, every problem that is presented. Usually it will not be difficult to say what type of a car is best suited for a particular use. Often, however, it will be found safest to consult the factory, for in each large American plant, as has been said, there are innumerable records of experiences and tests that will furnish absolutely exact information and guidance.

Whether an agent or dealer has hitherto made a study, or not, of American motor vehicles for commercial use, he will find it of great interest as well as value to communicate with the advertisers in this line in this publication, and obtain from them the fullest possible information, which they will gladly furnish, as to their product and its diversified uses and advantages.

The foregoing suggestions apply not only to agents and dealers, but to all readers of the INTERNATIONAL REVIEW. They should be considered by every merchant, manufacturer, planter, farmer—by every individual, in fact, whose business can be increased or expenses diminished by the use of one or more motor vehicles. Not only is there an opportunity for expansion and greater profits in businesses already established, but prospects as favorable, or more so, exist for new enterprises in which automobile transportation can be utilized to advantage.

Often, owing to local conditions, the circumstances of distance or other causes, it may not be convenient for the person or firm interested to seek the nearest dealer. As has been indicated, the undeveloped or vacant fields of the commercial vehicle are far greater, not only industrially



*Motor trucks are valuable as substitutes for stage coaches—a 23-passenger bus made by the Garford Company*

but geographically, than those that have been occupied or entered. Therefore, in order to inform himself as quickly and thoroughly as possible, it may be better in many cases for the inquirer to address himself direct to one or more of the American manufacturers who are advertisers in this publication.

In comparison with the horse, the motor vehicle will be found more economical in almost every instance. But the field of transportation is so broad that certain types of trucks are particularly adapted to certain uses. It is therefore desirable to ascertain exactly the kind of truck that is most advantageous and will



*For light deliveries this Wagenhals 800-pound capacity electric delivery car has a wide range of usefulness*

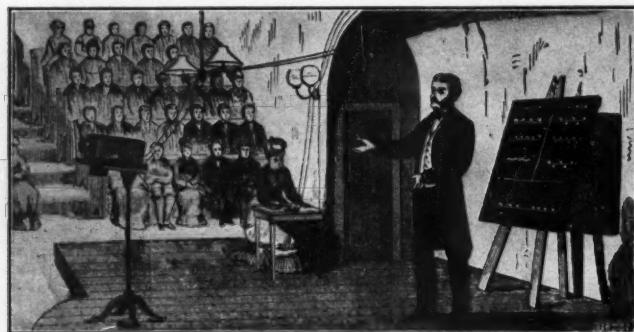
show the greatest net return on the investment.

There will be no charge for such information. The inquirer should not fail to give all the essential data at his command. He should state the kind of merchandise or material that he wishes transported; whether the service is in the city or country; the approximate length of hauls between stops; the character of the roads; climate extremes, if they are unusual, and whatever else seems to him to have a bearing on the subject. American manufacturers, as has been said, have in their engineering departments comprehensive data, compiled at first hand from years of actual experience, that covers almost every possible condition and phase of automobile transportation.

*Many department stores in the larger cities of the United States and Europe employ scores of light delivery cars—these are Waverley electrics*



[March, 1915]



Courtesy Western Electric Co.

The first long-distance telephone line—14 miles, between Salem and Boston, Massachusetts—was opened by Prof. Bell, February 12, 1877



Courtesy Western Electric Co.

Prof. Bell seated at the telephone formally inaugurating the line between New York and Chicago, 1,000 miles, October 18, 1892

## TELEPHONING 3,400 MILES

### The Transcontinental Line Between New York and San Francisco Opened for Traffic, January 25, 1915

THE first telephone line in the world was less than 100 feet long. It ran from one attic to another in a boarding house in the city of Boston, where Alexander Graham Bell and his associate, Thomas A. Watson, had been experimenting for many months to get an electric wire to carry the human voice. One evening—March 10, 1876—Bell wished to see Watson, who was in the adjacent room. He put his mouth to the crude instrument on which they had been working so long, and said:

"Mr. Watson, come here. I want you." These were the first spoken words ever carried over a wire. A moment later Watson rushed into the room shouting: "I heard you! I could hear what you said!" The telephone was born.

January 25, 1915, this same Alexander Graham Bell, sitting in the offices of the American Telephone and Telegraph Company, at New York City, talked to this same

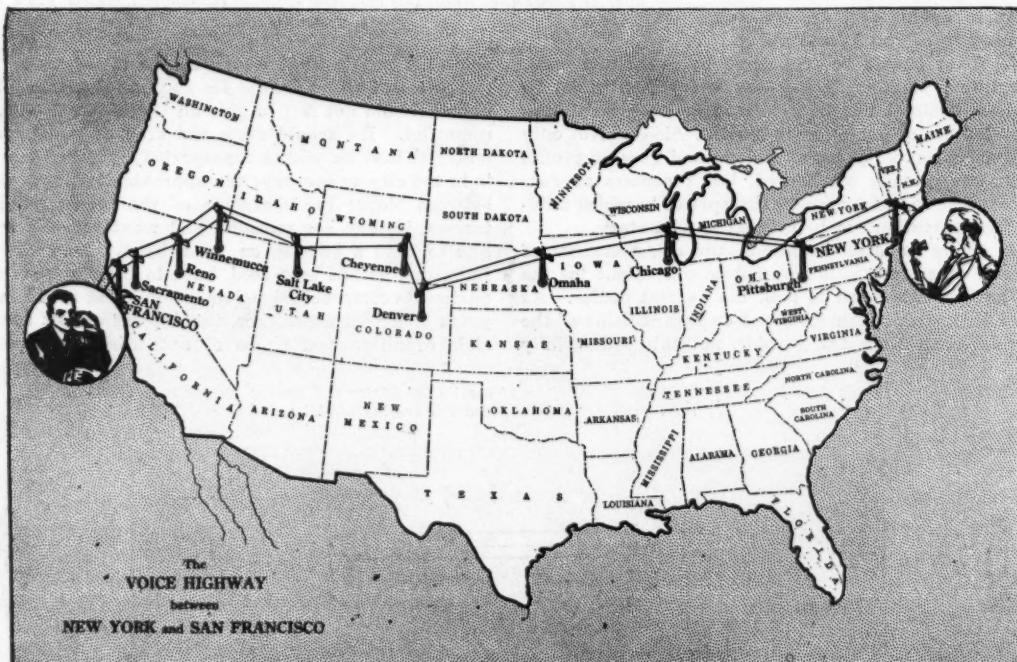
Thomas A. Watson in San Francisco over a wire stretching 3,400 miles across the continent—part of a system that included 9,000,000 telephones connected by 21,000,000 miles of wire.

Seated on a platform in the corner of the room were the Mayor of New York City and two other officials of the municipality; the chief engineer of the telephone company; and some of the head officers of the corporation. In the center of the group was Alexander Graham Bell, tall, erect, alert, his snow-white hair and beard the only evidence of his 67 years.

It was a dramatic moment in the history of science when the chief engineer gave a nod that meant that the New York-San Francisco line was open and that Watson was "on the wire." The audience, of some 200 invited guests, bent forward to listen as Dr. Bell put the telephone receiver to his ear and said:

*The route of the telephone wires between New York and San Francisco, opened January 25, 1915. This 3,400-mile telephone line is the longest in the world. There has been regular telephone service between New York and Denver—2,000 miles—since May 8, 1911*

Courtesy Western Electric Co.





Courtesy The Telephone Review

*Changes in the electrical current when the word "New York" is spoken into the telephone*



Courtesy The Telephone Review

*Changes in the electrical current when the word "San Francisco" is spoken into the telephone*

"Watson. Are you there?"

Dr. Bell's ruddy face was wreathed in smiles at the response. He paused and turned to those about him.

"He says that he can hear me perfectly," he exclaimed delightedly. "Isn't this wonderful, Watson," he continued. "Remember that time, nearly forty years ago, when you first heard my voice over the wire? Isn't this wonderful!"

Then there were other conversations between the two distant cities—among them a three-cornered one, carried on simultaneously, between President Vail of the Telephone Company, who was at Jekyl Island, on the Georgia Coast, several hundred miles to the southward, Bell in New York, and Watson in San Francisco. A number of others were "cut in" so those seated with Dr. Bell could listen.

Later, an exact copy of the first telephone instrument used—a cumbersome box-like article of wood, open the sides—was connected with the transcontinental wires and Dr. Bell and Watson talked together through it. As he put it down on the desk before him, Dr. Bell remarked, as if thinking aloud:

*Prof. Alexander Graham Bell, the inventor of the telephone, is the center of this group of municipal and telephone officials present at the opening of the New York-San Francisco line. At the extreme left of the picture is J. J. Carty, Chief Engineer of the Telephone Company, and at Prof. Bell's left, Mayor Mitchel of New York City*

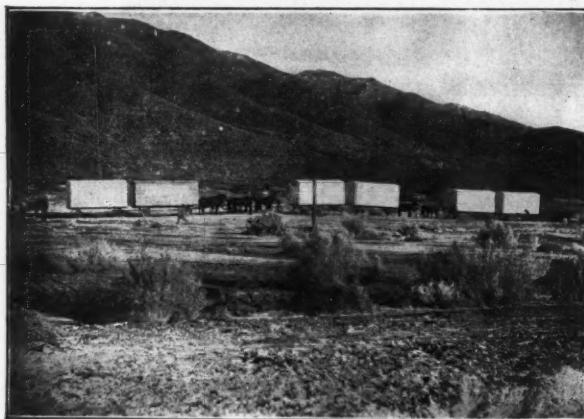
Courtesy American Telephone & Telegraph Co. Copyright, Underhill, N. Y.



"And to think that this dream of long ago has now become such a stupendous reality!"

Few men have seen so great a dream come true. Probably no two men before in all the history of the world's discoveries and inventions ever lived to see such magnificent results from work in which they had been the pioneers.

"When Bell invented that first feeble receiver," says *The Telephone Review*, published by the New York Telephone Company, "it was the beginning of telephones. There had been nothing like it, or anywhere near like it in all the ages. It was a creation—as far as scientific apparatus was concerned, it was made out of nothing. More than that, this crude instrument was all Bell gave to the art of telephony, but it was enough." While other inventors carried the great principle forward from the point where Prof. Bell left off, those connected with the development of the telephone business in the United States never failed to recognize their indebtedness to the first pioneer, and in 1877 Prof. Bell opened the first long distance telephone line between Salem and Boston—a distance of 14



Courtesy Western Electric Co.

*Blazing the trail for the transcontinental telephone line—moving a construction camp*



Courtesy Western Electric Co.

*After the poles have been set come the spinners of speech—the linemen who string the wires*

miles—and in 1892 the line from New York to Chicago. In 1911 the first long distance telephonic communication between New York and Denver took place—a distance of over 2,000 miles. The first conversation between New York and San Francisco above described was the next milestone in this record of progress.

How much still remained to be done in order to bring the crude telephone used in the first conversation between Bell and Watson 39 years ago to the high standard of efficiency that exists to-day can only be fully appreciated by those who understand the difficulties to be overcome by the telephonic engineer, and the subtlety and delicacy of the forces with which he has to deal. "The very minuteness of things makes his task herculean," says *The Telephone Review*. "Instead of having to figure on immense weights and masses, he is baffled by infinitesimally small fractions. His energies are devoted to conservation, and conservation of the most intense kind.

"It was, perhaps, little more difficult to string wires from Denver to San Francisco than from New York to Denver, but the actual construction of the line was the least of the engineer's troubles. His real problem was to make the line 'talk,' to send something 3,000 miles with a breath as the motive power. In effect, the voyage of the voice across the continent is instantaneous; if its speed could be accurately measured, a fifteenth of a second would probably be nearly exact. In other words, a message flying across the continent on the new Transcontinental Line travels, not at the rate of 1,160 feet per second, which is the old stage-coach speed of sound, but at 56,000 miles per second. If it were possible for sound to carry that far, a 'Hello' uttered in New York and travel-

ing through the air without the aid of wires and electricity, would not reach San Francisco until four hours later. The telephone not only transmits speech, but transmits it thousands of times faster than its own natural speed.

"But, while the telephone is breaking speed records, it must also guarantee safe delivery to these millions of little passengers it carries every few minutes in the way of sound waves created at the rate of 2,100 a second. There must be no jostling or crowding. These tiny waves—thousands and thousands of varying shapes—which are made by the human voice, and each as irregular and as different from the others as the waves of the sea, must not tumble over each other or get into each other's way, but must break upon the Pacific Coast just as they started at the Atlantic, or all the line fails and the millions of dollars spent upon it have been thrown away. And in all this line, if just one pin-point of construction is not as it should be, if there is one iota of imperfection, the miles of line are useless, and the currents and waves and sounds and words do not reach the end as they should. It is such tremendous trifles, not the climbing of mountains and the bridging of chasms, that make the Transcontinental Line one of the wonders of the ages.

"Who did it? Who made this wonderful achievement possible? Ten thousand men, beginning with Bell and Watson tinkering away at that first crude telephone in an attic, forty years ago. It has taken an army of thoughtful, conscientious, patient men, keen of brain and skilled of hand, striving day and night for the one great end—the perfection of a system and the conquering of time and space."

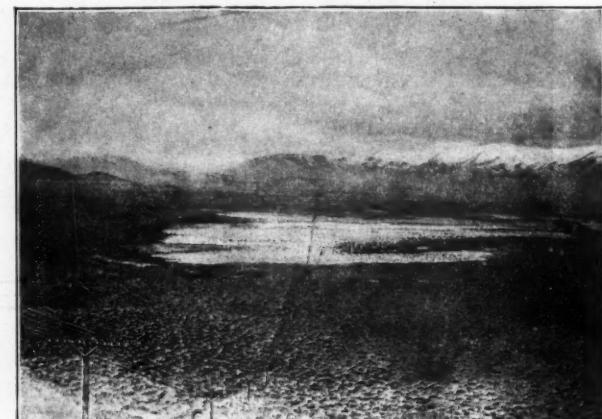
*Miles of poles are set across shallow lakes, varying in depth from 18 inches to 3 feet*

Courtesy Western Electric Co.



*The transcontinental telephone line crosses not only mountains and lakes but great deserts*

Courtesy Western Electric Co.



## AUSTRALIA AS A FIELD FOR IMMIGRANTS

To the Intelligent Farmer who is Seeking a New Home where his Experience, Labor and Capital will Produce a Larger Share of Wealth and Comfort than he now Enjoys, Australia Makes a Strong Appeal

*By a Special Correspondent in Australia—Illustrated from Photos Supplied by the Government Tourist Bureau*

No one can at present foresee what the economic effects of the great war now in progress are likely to be, but that they will be as vast as the conflict itself is certain. Among the possibilities of the future is a great migratory movement of the world's population, in the course of which thousands of men of intelligence may, with their families and belongings, seek new homes in countries where the conditions of life seem to them superior to those prevailing in the lands they leave behind. To such men Australia cannot fail to make a strong appeal, and the Australian Government is wisely making every effort to have the facts regarding that vast Commonwealth more widely known.

To dwellers in farming communities, Australia's opportunities will be especially attractive as agriculture is one of

Australia has taken into her society people of the same race, who speak the same language, and are fired by the same ambitions as her own people. The elements of Australian society—political, religious or industrial—have suffered no disturbance as a result of this policy.

Australia welcomes to her shores as permanent citizens all healthy people of white race who are of good moral character. Farmers and farm workers are extended a special welcome, for it is firmly believed that such settlers will do most to advance the interests of the country and of themselves. No other country offers such diverse opportunities or better chances of success.

Here is a territory larger than the United States, whose natural resources are beyond definite comprehension, with



*A dairyman's homestead in the State of Victoria, Australia*

the greatest foundations of the nation's wealth. Farmers with experience and capital, and capable farm workers, will find in Australia abundant opportunity to acquire homesteads quickly and on easy terms, while the methods of farming and the habits and customs of the people render it likely that they will not only be successful in their ventures, but will readily become assimilated with the population of the communities in which they settle.

Australia has hitherto looked to Great Britain for her supplies of immigrants, and has gained hundreds of thousands of people of a highly desirable stamp. They were given an open-hearted welcome and offered splendid opportunities in this rich and prosperous country of improving their fortunes while assisting in the task of nation building. Evidence there is in plenty of the successes by these newcomers, but more especially by those who embarked upon the great industries of the soil.

a salubrious climate and whose population, less than 5,000,000 people, are as contented and healthy, and probably richer and more prosperous than the inhabitants of any other country. Australia needs millions of people to develop her marvellous natural resources of soils and minerals still untouched and capable of almost infinite development. Think that a territory larger than the United States has as yet a density of population of less than two persons to the square mile. Australia could easily support a population as large as that of the United States, and the people who come now—who "get in early"—to this progressive young country, with so vast an extent of rich soils capable of producing those articles for which there is an ever-growing demand in local and oversea markets, and who take advantage of the opportunities existant, will find after a few years' experience that they have left a good land for a better one.

Influential visitors have been surprised at what they have

seen during their travels over the immense distances of Australia. They have been surprised at the richness and variety of the soils, at the wonderful agricultural possibilities, at the great sweeping extent of grazing lands or "cattle country," and the mineral deposits and the hard-wood forests. But what has surprised them most is that Australia has been at so little pains to make these things known. "Why," said one visitor, "if the facts about your



*A typical Australian wheat field*

country were known in my country I am sure you would gain many experienced and well-to-do farmers by every boat that leaves for Australia."

The simple truth is that Australia is a favored country. Its death rate is the lowest in the world—attributable partly to the salubrity of the climate and partly to advanced methods of sanitation and public hygiene. This sunny climate has a cash value to the farmer. His cattle graze in the open fields the whole year through. He is not put to the expense of erecting costly shelters. They are un-

necessary. The dairyman even allows his milch cows to remain out of doors during the whole twelve months. It is hard for the rural worker of most countries to realize the genial conditions which govern production in Australia. It must be difficult for farmers in the North temperate zone to forget for the time the snow and heavy frosts of winter and regard Australia as a place of almost perpetual sunshine. The apiarist in America or Northern Europe is obliged of necessity to house his colonies of bees over the winter months, the Australian bee-farmer may with safety allow his hives to remain out of doors the year through. The market-gardener has crops to sow and harvest during summer and winter, spring and autumn, and in the Australian orchard the smudge pot is unknown.

The Australian wheat farmer finds that his wheat ripens regularly and evenly and that the bright warm weather greatly facilitates his harvesting operations.

Australian soils are capable of producing—and do produce—every crop in the category. Australian agriculturists cultivating only 12,000,000 acres earn therefrom \$216,000,000 every year. To their industry and energy the rich soils and propitious climate respond and they become great wealth creators. The areas of good soils in Australia in districts favored by ample rainfall for successful farming run into hundreds of millions of acres. Yet of this great area but 12,000,000 acres have so far been brought under the plow. Practical farmers do not need to be told what prospects are opened up to them by this fact. At the same time land is cheap in Australia, and good yields and safe markets are assured. Good wheat land, easy of access to markets, can be purchased at \$15 to \$40 per acre, improved. The dairyman can purchase land at from \$48 to \$144 per acre. In the three Eastern States—New South Wales, Queensland and Victoria—most of the Government land of good quality and near railway communication has been disposed of, but the farmer may purchase suitable areas from private owners on very easy terms and conditions, generally a deposit of 10 per cent. and the balance in from 12 to 15 years. The terms for Government lands

*A flock of merinos on an Australian sheep farm*



are ridiculously easy. A deposit of from  $1\frac{1}{4}$  to  $2\frac{1}{4}$  per cent. of the capital value of the land has to be lodged and repayments of the principal and interest—which is generally at the rate of 4 per cent.—may be spread over a term of 31 years, and in some cases longer. Easier terms for acquiring farms could not be imagined than those which obtain in Australia.

The farmer who may be thinking of changing his home will be glad to know these facts. He will also be glad of the information that in all Australian States, monetary advances to settlers are made by the Governments to assist them to improve their holdings, or to build homes, or to purchase plants and machinery. The sums advanced vary in amount from \$240 to \$9,600 and are advanced on the security of land or improvements at low rates of interest, generally about 5 per cent. and on long terms of repayment, extending, as a rule, to 31 years.

The paternal Governments of the Australian States, in passing laws for the acquisition and settlement of the lands of the country, have given paramount consideration to the farmer or intending farmer with limited means. The cardinal idea of all such legislation has been not only to settle people on the soil, but to make the conditions such that they will be prepared to stay there. As a result a farmer coming to Australia can without difficulty acquire sufficient land to keep him in comfort, on easy terms and conditions. To free his capital for the purpose of developing his holding the Government makes him monetary advances at cheap rates, the railways, which all over Australia are State-owned, carry his produce at low freights, and the State Education Departments look to it to see that facilities for schooling his children, even in the most remote districts, are provided.

When farmers in other countries contemplate all that this means and contrast the conditions outlined with those under which they are at present living, they will realize that Australia makes them a tempting offer.

The case of the wheat farmer has been set out at some length, but Australia offers similar inducements to the

dairyman, the orchardist, the truck farmer, the apiarist, the sheep or cattle raiser and to the irrigationist. The irrigation farmer, especially, finds magnificent opportunities in Australia. The Governments of the States of New South Wales, Victoria and South Australia have spent large sums in bringing suitable tracts of country under irrigation. These large irrigation schemes are gravitation schemes and are run as State enterprises. They do not



*A successful Australian irrigation project*

have to earn dividends for private shareholders. This means that liberal terms can be made. In Victoria such lands can be purchased—and in the other States acquired on "perpetual lease," that is, for all time—at exceedingly low rentals. The prices for such lands range from \$48 to \$100 per acre. The price paid for water is generally \$1 per acre foot, and a certain and ample supply is assured.

There is a cheerful prospect ahead for the producer of foodstuffs in Australia. The farmer's market cannot be glutted. As production increases his own home market is

*Cultivators at work in a field of young maize*





*A herd of cattle in Queensland, Australia*

growing, and each year the other great producing countries require more and more of their own products for themselves. Both his local and export trade is, therefore, likely to grow. Added to this is the fact that production with improvements in appliances tends to cheapen, and the carriage of produce both in the country and oversea is becoming cheaper. It may be said that the keynote of Australian farming is "low cost of production." The yields in comparison with those of other countries are low, but it is doubtful whether the Canadian or American wheat-grower reaps a greater reward for the area he cultivates than his Australian cousin. In fair average country not remote from railway communication, a wheat crop can be sown and reaped in Australia at a cost of \$5 to \$7.20 per acre.

This is for a 15-bushel crop on an area of from 250 to 300 acres. As the area increases the cost of production shows a slight decrease per acre.

Australians as a people are happy, contented and prosperous. In a population of only 4,733,000 souls there are 1,833,400 depositors in the country's savings banks, or roughly speaking, one person in every three has a bank account. The amount deposited amounts to \$336,000,000. Perhaps there is no better index to the country's prosperity.

All classes in Australia share in the country's general prosperity, but to the farmer more particularly, Australia is able to offer the best chances of success. In most countries millions of men want acres, in Australia millions of acres want men.

*Collins Street, one of the leading business thoroughfares of Melbourne*





Courtesy John Wanamaker, New York

*Library in the "House Palatial," a series of rooms in a great New York department store in which furniture is displayed just as it would be arranged in a rich man's home*

## CREATING A DULL SEASON DEMAND FOR FURNITURE

How the Great Department Stores of the United States have Developed  
August and February Furniture Sales into an Important Trade Institution

TWICE a year, in the months that normally are the dullest from the standpoint of the retail merchant, the leading department stores in the principal cities of the United States have for many years past conducted special furniture sales that have proved so successful that it is possible that merchants in other countries may find some useful suggestions in this plan which can be adapted to their own local conditions. Furniture, unlike many commodities, has no particular season of activity. Young people get married and start housekeeping during every month of the year, while there seems to be no particular time when householders replenish their furniture supplies. Under these circumstances it seemed to be impossible to create a seasonal demand in this line whereby both merchants and manufacturers could benefit by the greatly stimulated public interest and by the opportunity thus afforded for clearing away surplus stocks, in order to make room for new styles and designs.

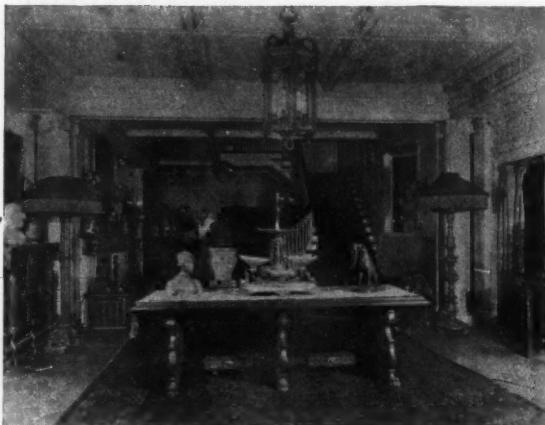
The credit for the innovation in selling methods that has given the furniture trade in the United States two seasons of great activity belongs to John Wanamaker, who originated the first August furniture sale as far back as the early eighties, or possibly a little earlier. August had been until then an extremely dull month in the furniture department, but the idea of a special sale—with all lines priced from 10 to 50 per cent. below the prices usually charged for the same articles—proved so popular that the volume of business done in this ordinarily dull month was the heaviest in the store's history. The plan

proved so successful that during the nineties the February sale of furniture was started, and has been continued ever since, with steadily increasing success.

In one of the first advertisements of its February sale of furniture the Wanamaker store said:

"This is ordinarily the dull season for furniture makers. Factories run cautiously, or shut down altogether. Accumulated stocks weigh heavily on the minds of anxious manufacturers. The necessities of the trade demand new styles for the season rapidly approaching, while the goods of the present season remain unsold. It is a time of anxiety, hesitation, lassitude and sacrifice."

This situation created an opportunity for the Wanamaker establishment, with its two great stores in New York and Philadelphia. By means of these special sales it was able to offer manufacturers an opportunity to clear their warerooms of surplus stock, to be turned over to the consuming public and thus converted into cash immediately. This was an advantage for which the manufacturer was glad to pay by allowing an exceptionally low scale of prices, as it enabled him to keep his organization together, his workmen employed, and provided him with funds to start operations on new goods for the coming season. The store, on the other hand, found it advantageous to turn over the savings thus effected directly to its customers, thereby insuring a quick turnover, and a complete clearing of its vast furniture showrooms. This enabled the store to keep its salesmen employed during the dull season, while the economies offered to the public



Courtesy John Wanamaker, New York  
Reception hall in the "House Palatial"—note the charming and harmonious lighting arrangements



Courtesy John Wanamaker, New York  
The cheerful breakfast room in the "House Palatial," which adjoins the main dining room

were so great as to induce large numbers of people to buy at a time ordinarily known as "out of season." The special sales, therefore, proved an advantage to all parties concerned—to the manufacturers, to the store, and to the public.

Other great department stores throughout the United States were quick to perceive the important advantages of these special August and February furniture sales and it is hardly too much to say that at the present time such sales are an established feature of the furniture trade in the United States. Both manufacturers and the consuming public look forward to them as special events. Obviously—like any other excellent merchandising plan—this one can be abused, and unscrupulous merchants have occasionally organized fake sales in imitation of the bona-fide originals. These, however, proved short-lived and at present it is very seldom that either an August or February sale is conducted on any extensive scale save by department stores of the highest class and of unquestionable reputation. This sales idea would be particularly effective in countries outside of the United States if instituted and maintained by the leading furniture distributor in each large city. Such a concern has the confidence of both manufacturers and buyers, and can readily enlist the co-operation of the former to an extent that would be impossible for a small concern of doubtful reputation.

The effective display of a vast quantity of furniture, such as is assembled for these sales, is a matter of more

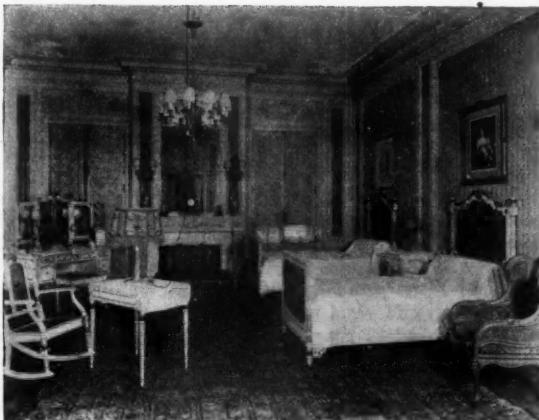
than ordinary difficulty, but years of experience have enabled the department stores to solve this problem with great success. As far as possible the furniture is arranged, not in dreary rows of chairs or tables, all more or less alike, but in harmonious groups just as it would be placed in a private residence. This idea was carried out on a very lavish scale by John Wanamaker in his celebrated "House Palatial," of which several illustrations accompany this article. Here a number of connecting rooms were filled with all of the furniture appropriate to each part of the house, beginning with the entrance hall and passing onward through the reception room, parlors, library, dining room, breakfast room, kitchen and a complete suite of bedrooms, each furnished in a different style. All of the furniture in these rooms is changed from time to time in order to keep abreast of current styles, and buyers—particularly those who are planning to furnish a home throughout—no doubt often find such exhibits extremely helpful, as the most experienced furniture experts have made a special study of having everything in each room in complete harmony.

While the "House Palatial" has usually been devoted to exhibits of comparatively high-priced furniture, such as would be suitable for a mansion or apartment of some one of great wealth, other stores have organized similar displays in which the furniture was carefully selected with a view to showing what could be done by a purchaser of moderate means. A particularly successful exhibit of

A mahogany inlaid dining room suite, Sheraton model, offered complete at \$230, and comprising buffet, china closet, serving table, dining room table, five side chairs and one arm chair

Courtesy Frederick Loeser & Co., Brooklyn





Courtesy John Wanamaker, New York

*Two attractive bedrooms in the "House Palatial," one equipped with twin beds—the carpets, wallpaper and decorations in each room harmonize with the furniture*

this character has for many years been a feature of the furniture department of Frederick Loeser & Company, of Brooklyn. Two of the illustrations accompanying this article show typical rooms, or groups of furniture, thus exhibited in the Loeser Company's February sale of this year. This method of displaying furniture is by no means confined to the department stores of the United States. A particularly successful and harmonious series of rooms, each showing a complete equipment of the furniture appropriate to the purpose for which the room was intended, was exhibited in the great department store of Leonhard Tietz, of Brussels, last summer and has no doubt been a feature of that enterprising establishment for many years.

One of the incidental advantages of the special August and February furniture sales is that these events afford an excellent opportunity to the advertising department to do some very effective publicity work, both in display advertisements in the daily papers before and during the sales, and in circulars or booklets to be mailed to all the regular patrons of the store. In these booklets—which are often very elaborately gotten up—it is possible to illustrate and describe a great many of the offerings. An interesting evidence of the effectiveness of this preliminary work was shown in the February sales of this year. The opening day was an unusually stormy one, but in the large New York and Brooklyn department stores that had special furniture sales, the crowd of buyers that braved the storm more than taxed the capacity of the clerks to

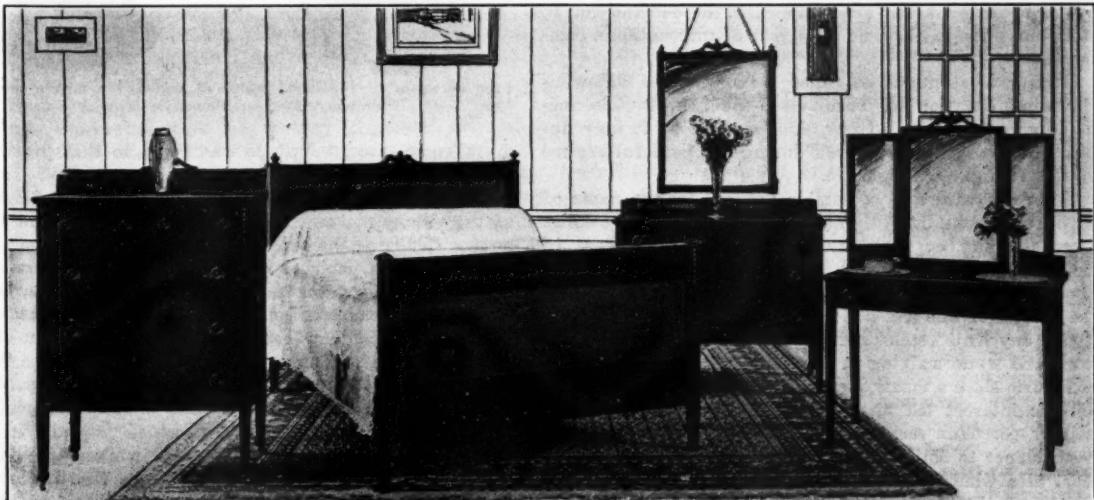
handle them, despite the fact that a large additional sales force had been placed in the furniture departments for this occasion.

Some idea of the size of the February sales at New York can be obtained from the fact that a single store claimed that its stocks on that occasion aggregated \$946,000 in value. Another store advertised \$100,000 worth of library furniture alone, an equal amount of dining room furniture and \$150,000 worth of bedroom furniture alone. In all the stores additional floor space aggregating, in some cases, several acres, was filled with furniture and even with this vast amount of space available it was found impossible to show more than a single sample of each line. In the store last mentioned 88 different styles of dining room suites were exhibited, 112 styles of sideboards, 86 styles of bedroom suites, 314 styles of bureaus, 280 styles of chiffoniers, and so on. In such a bewildering array of offerings there could not fail to be something exactly adapted to every taste and every pocketbook.

In countries where the bulk of the furniture sold is imported either from the United States or Europe, dealers who think favorably of this plan of holding special semi-annual sales during the dullest months of the year may find it worth while to correspond on the subject with American manufacturers. Naturally the particular months during which such sales would be desirable will vary according to the different countries, climates, and general trade seasons. This, however, is a matter of detail.

*A bedroom suite, Adam model, offered at \$155 complete, and consisting of bedstead, chest of drawers, hanging mirror, chiffonier and dressing table, and finished in either mahogany or ivory enamel*

Courtesy Frederick Loeser &amp; Co., Brooklyn



## THE CLOISONNÉ INDUSTRY IN JAPAN

How a Peasant Rediscovered a Lost Art which has Now Become of Much Commercial Importance

By Jujiro Suzuki, of Tokio, Japan

CLOISONNÉ ware does not yet constitute a big item in the list of Japan's exports to other countries, the volume of the business done in this direction still being comparatively insignificant. According to statistics, the annual amount of production reaches a half-million yen or thereabouts. Yet, as nearly all of this is exported



*Native workman making Cloisonné ware—this industry is largely centered in the Nagoya district of Japan*

abroad, it is not an unimportant contribution towards the development of Japan's foreign trade.

The origin of cloisonné-making in Japan is somewhat obscure. According to one historical record, the first manufacture of cloisonné was inaugurated about 1,200 years ago, during the reign of the Emperor Temmu. Another record tells us that it was first manufactured in a later period, the industry, or rather the art, reaching its acme when the reins of government were in the hands of the Ashikaga Shogunate. It may be mentioned that some beautiful articles of cloisonné made in those days are still preserved in the Museum of the Imperial Household. Of course, in that far-off time, cloisonné, because of its rarity, was regarded as a sort of treasure. To-day, however, owing to its increased production and the demand for it, cloisonné ware has become an article of international commerce.

During what might be called the dark ages following the administration of Yoshimasa, the art of cloisonné-making practically died out, and, strange as it may appear, it was not revived even during the peaceful régime of the Tokugawa Shogunate.

Some 86 years ago, a humble peasant by the name of Kaji Tsunekichi, dwelling in a small village about 8 miles from the city of Nagoya, rediscovered the process of cloisonné-making. A very interesting story is narrated about the incident which finally led this old peasant to the revival of this lost art.

One day Kaji Tsunekichi went to Nagoya on some business, and while walking in the streets he happened to see in a curio-store a small queer-looking tray. Curiosity and artistic interest led him to examine it closely. It was neither porcelain nor glassware, although it bore a close resemblance to both. The peasant, of course, had not the least idea what it was, but it attracted him so strongly that finally he purchased it and carried it home.

Now Kaji Tsunekichi was a man without education, but was endowed with a remarkable power of perseverance. His desire to know what the ancient tray was made of, and how it was made, grew more intense each day until he could resist it no longer. He felt that he must find out—if he could—and make a tray like the original. His first step required courage and confidence. He carefully broke the ancient tray to bits in order to study the secrets of its composition. As a reward for his perseverance and repeated experiments, he succeeded, after a long time, in producing a tray as beautiful and perfect as the original he had destroyed. To this he gave the name "Shippo" (seven treasures). This was the beginning of modern cloisonné-making in Japan.

Greatly encouraged by the success thus attained, Kaji Tsunekichi continued to produce many articles of the "seven treasures" ware and presented them to the Feudal Lord of his province (Owari), who, being very much pleased with these specimens of rare and exquisite beauty, built a model workshop for Kaji and assisted this pioneer cloisonné-maker financially and otherwise for the further advancement of this wonderful art.

When the achievement of Kaji was made known throughout the whole village, many peasants came to him and sought to be instructed. Kaji took them all as his apprentices. In the course of time, the entire population of the village became cloisonné-makers, so the name "Shippo



*Two examples of Cloisonné ware, of which the native name is "Shippo," meaning "seven treasures"*

mura" or Cloisonné Village was given to that particular section of the province.

Subsequently quite a number of the cloisonné-makers of the village moved to the City of Nagoya, a few miles away. Realizing the superiority of the geographical situation of Nagoya, which was likely to become a commercial and industrial center between Tokyo and Osaka, many more followed the example of the first. As a consequence the cloisonné industry became centered in Nagoya, where it still remains, although cloisonné-makers are also found in Kyoto, Yokohama and elsewhere. No wonder, then, that cloisonné ware, counted as one of the chief products of Nagoya, has made that city famous.

Some of those who are interested in cloisonné-making in Japan are striving hard to build up the industry to something like the same magnitude as that of porcelain.

## TWO NOTABLE CONFERENCES ON FOREIGN TRADE

An Evidence of the Earnest Desire of the American Merchants  
and Manufacturers to Properly Extend their Export Business

**S**INCE the outbreak of the great war in Europe trade relations between the United States and other countries have been a subject of widespread interest, and many who had never before devoted much study to the practical aspects of American export trade have given much time and attention during the last six months to the many problems that confront the merchant or manufacturer who desires to extend his selling campaign into far-off lands. It is to be hoped that this period of study will be productive of benefit, not only to American exporters but to the importers of other countries doing business with them. A noteworthy feature of the various conferences regarding foreign trade opportunities and methods that have been held in different parts of the country during the last six months has been the effort to make the discussions as practical as possible. This was particularly the case with the two important conferences held early this year at St. Louis and at the national capital.

Some of the most pressing problems of foreign trade thoroughly discussed at the convention held in the city of St. Louis, January 21-22. This meeting was especially noteworthy as a striking evidence of the earnest desire of many representative men connected with great American industries to extend the exports of the United States in a manner commensurate with the country's importance in the field of international commerce. It was unusually interesting because the addresses were by men of wide practical knowledge and long experience.

The gathering was officially styled the Second National Foreign Trade Convention—the first having been held at Washington, D. C., in May, 1914—and was held under the auspices of the National Foreign Trade Council, which will act officially on the suggestions and ideas brought forth in the discussions at the meeting.

The National Foreign Trade Council, which was organized in June, 1914, is a body whose object is to co-ordinate and nationalize the foreign trade activities of the United States. It consists of manufacturers, merchants, railroad and steamship men and bankers, representing all sections of the country and collectively standing for the general interest of all elements engaged in, or affected by, export trade. Its function is investigative, advisory and educational. The Council is, in effect, a national committee for the general welfare of the foreign trade of the United States. It is non-political and non-partisan. The Council endeavors to co-operate with, supplement, and so far as possible, co-ordinate the efforts of other organizations to extend American commerce. It leaves to bodies already in the field the function of providing detailed information and advice to individuals, manufacturers, merchants and others, regarding foreign trade opportunities.

Each of the addresses before the National Foreign Trade Convention was followed by a general discussion of the ideas presented by the speaker. Among the subjects thus brought before the Convention were: "Problems of War and Commerce," by John Bassett Moore, former Counsellor of the State Department, who spoke of the duties imposed upon neutrals, and the rights belonging to or asserted by belligerents; "Freedom for our Foreign Trade," by James J. Hill, Chairman of the Board, Great Northern Railway, who emphasized the necessity of the provision of adequate ocean carriage; "Foreign Banking, Loans and Credit," by John J. Arnold, Vice-President, First National Bank, Chicago, who advocated the organization of banking corporations whose capital should be subscribed by Americans interested in the trade of the countries where such institutions are established.

Other addresses were: "Commercial Education for Foreign Trade," by Prof. Edwin F. Gay, Dean of the Gradu-

ate School of Business Administration, Harvard University, who pointed out the need of specially trained men and the opportunities awaiting them in the broadening export field; "Export Trade and Neutral Duty," by Carman F. Randolph; "An American Merchant Marine," by Welding Ring, of Mailer & Quereau, New York City, and a delegate of India House; "Co-operative Foreign Selling for Smaller Manufacturers," by H. C. Lewis, General Manager of the National Paper & Type Co., New York City; "Foreign Credits," by C. A. Green, of the Foreign Department of R. G. Dun & Co.; "Government Regulation of Commerce as Affecting Foreign Trade," by W. L. Saunders, Chairman of the Board of the Ingersoll-Rand Company, New York City, and "Problems of the Smaller Manufacturer and Merchant in the Development of Foreign Trade," by W. C. Downs, U. S. Commercial attaché for Australasia.

An address was delivered by James A. Farrell, President of the United States Steel Corporation and Chairman of the National Foreign Trade Council, and by F. I. Kent, Vice-President of the Bankers' Trust Co., New York City.

Hon. William C. Redfield, Secretary of Commerce of the Federal Government; J. J. Slechta, New York agent for the Lloyd Brazileiro Steamship Co., and Lorenzo Daniels, of Bush & Daniels, agents for the Lamport & Holt Steamship line, were among those who took a prominent part in the discussions.

Some of the subjects which were vigorously debated at this convention are of special interest to merchants and importers in other countries. In the course of his address, Mr. W. L. Saunders, Chairman of the Board of the Ingersoll-Rand Company, had this to say regarding agents as trade builders:

"Everyone engaged in foreign trade knows that co-operation, concentration and capital are needed to secure a large volume of export trade. To send an agent to a foreign country as a representative of several different lines of industry is usually a mistake. Each concern contributes a small sum of money annually and the agent in his efforts to cover several lines of trade does full justice to none. He may get an order now and then, but no permanent business is established. The best man—one equipped with the full knowledge or experience in one particular line—will find hard sledding in most foreign markets. It takes years of time, volumes of money and much patience to get established, and when success comes a strong organization must be maintained and a large volume of business done in order to show a profit on the balance sheet. The sooner American merchants realize this the better, for the export trade of the United States is well worth having."

"We do about twenty thousand millions of dollars worth of business in manufactured products in our home trade and only about one thousand millions in foreign countries. Of all our manufactured exports about one-third is represented by mineral oil, iron and steel and agricultural machinery, thus indicating that export trade in American manufactured products is the most fertile and encouraging field which is now open for cultivation and expansion."

In his address regarding the foreign trade problems confronting the smaller American merchant and manufacturer, Mr. W. C. Downs, U. S. Commercial Attaché for Australasia, pointed out that there was no excuse for the American manufacturer, no matter how small, not being able to ascertain regarding the suitability of his goods for any particular foreign market. The United States Government places at his disposal a vast amount of information of this character that it has compiled and

collected for many years. Data along this line may also be obtained from various organizations for the promotion of foreign trade. A third source is the export trade journal, of which Mr. Downs said:

"Export trade journals should be included in a catalogue of the available sources of information regarding foreign demand. While their principal function is that of bringing American goods to the attention of the foreign buyer through their advertising columns, it also follows as a corollary that they must be in a position to prove to a manufacturer that there is a potential demand for his product in order to induce him to undertake an advertising campaign. Consequently most of these journals maintain an experienced and efficient special staff who study trade requirements abroad and are ready to pass on the results of their studies to interested parties. They are also in receipt of many specific inquiries from foreign merchants into whose hands their publications may come which can furnish valuable hints of new lines of business."

He also commended the facilities offered by export commission houses that have had the advantage of many years experience and an accumulated fund of knowledge regarding the markets in which they operate.

The speaker favored the appointment, by American firms seeking to establish a foreign trade, of well-qualified and reliable permanent representatives or agents in the principal foreign trade centers; and that—where the goods were of such a nature that there would be a fairly constant demand for them, once they were introduced—the agents' efforts should be supplemented, from time to time, by the American firm sending a specially trained salesman from the home office. Such a salesman would be a means of keeping the foreign agents actively interested in the goods, and on his return to the United States, would bring back a wealth of knowledge regarding requirements and local conditions in the regions he had been visiting.

On February 3rd the Chamber of Commerce of the United States began its third annual convention at the New Willard Hotel in Washington. This organization, which has been termed "the greatest business body in the world," is made up of officially accredited representatives of 624 Chambers of Commerce, Boards of Trade and other business organizations in the principal cities of the United States, Porto Rico, the Philippines, Alaska and Hawaii.

At the second session of the Chamber, held in the afternoon of February 3rd, the delegates were addressed by Hon. William J. Bryan, Secretary of State, and Mr. Samuel McRoberts, Vice-President of the National City Bank of New York. Mr. McRoberts spoke on "Our National Policy as to Investments Abroad," saying in part:

In the Orient, in the Caribbean, in the northern part of South America, in Mexico, we have the opportunity to do great constructive work, and by so doing win a place of our own in the future commerce of those lands, just as England did in India or the Argentine, under even more difficult conditions. The uncertainty of protection stands squarely in the way.

As long as a question can be raised as to the property rights of Americans in respect to investments made outside of the territory of the United States our foreign commerce will languish. Nothing beyond sporadic efforts will be made. Capital and the life efforts of many men are required. Capital is timid, and naturally wants to stay at home. It can only be coaxed over the border. Men will not risk their life's work and hope of reward upon uncertainties. No broad and comprehensive campaign will be possible without the same certainty of support and protection that is afforded by the foreign offices of every world power but our own.

This defect in our foreign policy can only be remedied by a wider and clearer understanding of the whole question and the resultant action of public opinion. What we need is a settled and dependable policy, and under our form of government no policy can be constant unless based upon a compelling public opinion. That we have wise and courageous men at the head of our government does not suffice.

Four years is as a day in the life of a nation, and effort is wasted as long as it is possible to have one foreign policy on March 3 and another March 4. Furthermore, our public men are necessarily limited in their activities by how far the country can be induced to follow them, and we must recognize that limitation.

At the third session of the Chamber, which was held on the evening of February 3rd, the convention was addressed by the President of the United States, while at the session which took place in the afternoon of February 4th the delegates listened to addresses by Hon. William G. McAdoo, Secretary of the Treasury, and Hon. Theodore E. Burton, United States Senator from Ohio, relative to the ship purchase bill, which was then pending in the United States Senate. The former presented the side of the Administration, while the latter outlined the principal arguments in opposition to the measure. The convention, after considerable discussion, voted in favor of a referendum, the subject being referred to the various trade organizations represented by the delegates.

At the session of February 5th the convention was addressed by his Excellency Romulo S. Naon, the Ambassador from the Argentine Republic, who advocated the complete neutralization of commerce between the Americas in ships of all nations, and said in part:

It seems to me that perhaps the way to meet this serious inconvenience—the getting of ships in sufficient numbers—would be to procure the complete neutralization of inter-American commerce. It is undoubtedly not an easy task at the present moment to solve as we would desire all the difficulties encountered by the neutral commerce of the world in view of the conflicting interests of the belligerent countries.

But there could be no reason which would justify opposition to the maintenance, to the fullest extant and without any hindrance whatsoever, of commercial interchange between the ports of our continent. I maintain that the complete neutralization of inter-American commerce ought to be recognized, and therefore I entertain the hope, or, more than that, I might say that I feel the certainty, that we would be able to have the countries at war agree with us in establishing the rule that during the present war and forever no vessel engaged exclusively in the trade between American ports shall be subject to search, detention or capture by a belligerent, no matter what flag she flies, so long as she is engaged exclusively in that commerce.

With such a rule we would be able to obtain all the vessels we need for the promotion of our commerce with the United States and the other American republics to the maximum, developing as a consequence our friendly relations with all of them and lessening the sorrowful conditions created by that war.

Another interesting address on February 5th was delivered by Edward A. Filene, of Boston, a member of the executive committee of the International Chamber of Commerce who was largely instrumental in bringing the fifth annual convention of that body to the United States. The subject discussed by Mr. Filene was "Trade Expansion and the European War," the speaker saying in part:

For the first time in our history the United States as a nation not only really desires and needs a larger foreign trade, but seems willing to pay the price for it in hard study, planning and fundamental work. But this desire and need come at a time of most extraordinary conditions all over the world, and can be satisfied only by new and extraordinary methods.

New machinery for making foreign trade must be found and tested, and this machinery must be better than any employed by our competitors of other countries. Happily, the business men of this country are renowned for their ability to scrap outgrown machinery and to invent new.

Although there are notable exceptions where individual concerns have created important foreign markets for their products, experience has taught that all foreign trade that is in really worth-while quantities and permanent must be obtained by co-operation of business men; and this is based on the fact that the markets to be conquered must be thoroughly studied. Moreover, they must be continuously watched and restudied if the trade is to be retained. Such study and investigation is too costly for all but a few exceptionally large concerns.

It seems to me, therefore, that the best method for the investigation and conquering of foreign markets is that it shall be made for each trade by its national trade organization, by which almost every kind of business in this country is represented. I mean that such trade organizations shall send the ablest representatives they can procure into foreign countries to investigate, study and organize the markets. All the information they obtain and all the help they can give should be common to all members.

At its annual banquet the Chamber was addressed by Hon. Wm. C. Redfield, Secretary of Commerce, and Hon. Charles S. Hamlin, Governor of the Federal Reserve Board. Several of the important subjects discussed at the various sessions, including the development of the American merchant marine, will be considered at length by the various trade organizations throughout the country that this important Chamber collectively represents.

# ON THE HIGHWAYS OF COMMERCE AROUND THE WORLD



**NEW ROUTES BY LAND AND SEA. IMPROVED PORTS AND DISTRIBUTION CENTERS.  
BETTER METHODS AND EQUIPMENT**

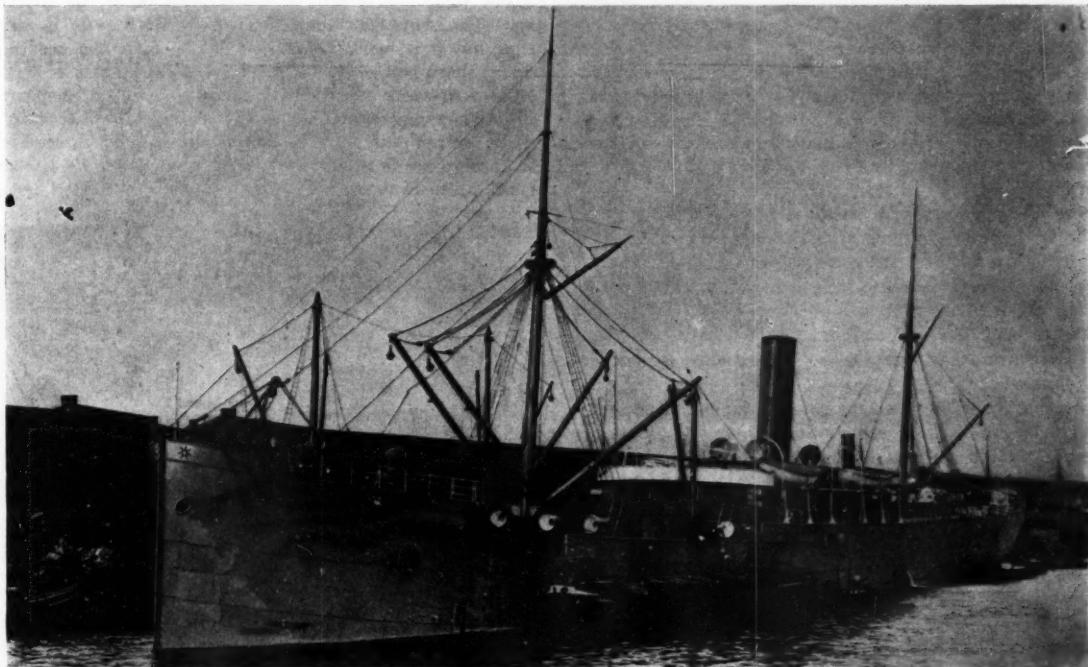
## THE SHIPPING SITUATION

An Increasing Demand and Diminishing Number of Vessels  
for Trans-Atlantic Traffic—Elsewhere the Supply is Adequate

THE large and constant increase in the volume of freight moving from Atlantic and Gulf ports of the United States to European ports, and other causes more or less directly connected with the war, have contributed to bring about certain marked changes in the shipping situation in the last two months. There has been a growing demand for steamers for cargoes of grain, cotton, general merchandise, etc., and the available supply of such boats has decreased proportionately. As a consequence, ocean freight

the nations at war. Still others have been interned or destroyed in the course of the hostilities. All these causes have served to cut down the available supply of freight carriers, which has had a corresponding effect on rates.

This has not affected in as great a degree the long voyage freight movement. The ocean rates to Asia, Africa, Australia and New Zealand are, as a rule, firm and not appreciably higher than they were last October. To the west coast of South America the rates are very nearly what they were prior to the outbreak of the war. Rates to the east coast have receded slightly, as compared with two months ago. To all the ports of South and Central America, in fact, sailings continue with practically undiminished regularity and a fair supply of space is available.



*The S. S. Dacia at the beginning of the war was a Hamburg-American liner, and is now sailing under American registry. She left Galveston early in February with a cargo of cotton destined for Germany*

rates eastbound not only have been firm, but have steadily advanced.

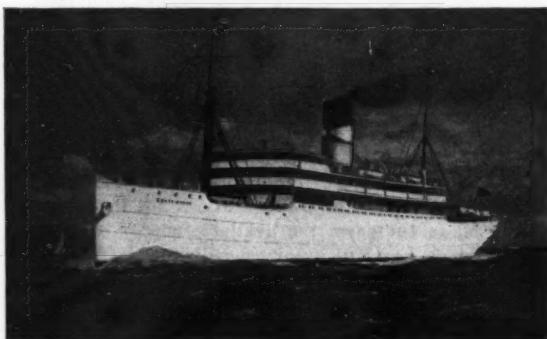
The majority of the large and swift passenger steamers that were engaged in the trans-Atlantic trade in the early days of the war have been withdrawn from service. Travel is always light during the winter months and, under normal conditions, a number of ships usually are laid up for overhauling or else put on other routes. This phase of the situation is especially accentuated this winter. Furthermore, many vessels, not only passenger but freight steamers, have been requisitioned for military purposes by

Owing to the large volume of exports, many of the lines have chartered other steamers to augment the service they have been accustomed regularly to provide. Ocean charter rates, as a consequence, have risen. Since the beginning of the war the Holland-America Line has added to its regular fleet of 19 vessels by chartering between 30 and 40 extra steamers. Deducting the number whose charters have expired, there are still some 20 ships in the service of this company outside of its own fleet. Barber & Company have added 45 freight steamers to their fleet. These are for the most part tramp steamers of considerable capacity,

and have been acquired by charter in order to take care of the volume of business that is offering.

Rates of war risk insurance, while they are higher than two months ago, owing to North Sea and Channel conditions, are below what they were in August. Fluctuations, however, are likely to occur unexpectedly, and shippers should consult their brokers whenever interested, both as to insurance and as to freight rates.

At the port of New York the amount of freight offered, especially as regards full cargoes, is very large, and the



*Thirteen of these 5,000-ton passenger steamers are operated by the United Fruit Company between New York City and Caribbean ports*

supply of vessels relatively light. Small shipments, however, are moving without any marked delay.

Conditions at Philadelphia and Boston are similar to those prevailing at New York. Some difficulty is experienced in obtaining ships for cargoes ordered, and rates are firm, with a tendency to advance.

The demand for shipping at Baltimore has increased considerably in the last two months. Owing to this and to the relative scarcity of ships, due to so many having been requisitioned by various governments, freight rates have advanced and are firmly maintained, although tonnage is being freely offered.

There is a good demand for tonnage at Mobile, and the supply of steamers is limited. The cotton movement is light at present, but there is a considerable amount of lumber awaiting shipment to European ports. Most of this is being carried abroad by sailing vessels. The movement of staples and general merchandise to Latin-American countries continues to increase and has reached a considerable volume.

The situation at New Orleans has shown general improvement during the last month or more, many lines having resumed regular sailings. While the tonnage is ample, rates have been gradually increasing, especially on cotton. Foodstuffs continue to be the principal commodity exported, and the movement of practically all grains is above normal. England latterly has been taking much more cotton than at any time since the outbreak of the war.

The shipping situation at Galveston is particularly interesting, as that port now leads all others in the export of both grain and cotton, and is also receiving considerable imports of cattle, bananas, nuts, beans, etc., from Mexico. Nearly 100 steamers, practically all of them freighters carrying wheat or cotton, were booked to leave Galveston during January and the early part of February. Grain shippers are reported as bidding high for bottoms, and thus securing every ship that is available. Tonnage is scarce for the amount of freight offered for quick shipment, but bottoms are arriving at the rate of five or six a day, and are loaded and cleared as soon as possible. About 7,000 workmen are kept constantly employed at this work night and day.

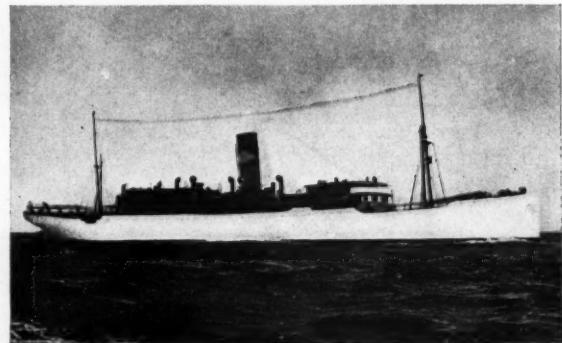
There is also a considerable movement of other products, such as horses for the foreign armies, cotton seed products, oil, lumber, etc., and coastwise steamers are being pressed into service.

To the casual observer it would seem that the shortage of vessels for trans-Atlantic traffic might be somewhat relieved by diverting a number of ships from the service between the United States and South America, where the supply of bottoms is rather more than adequate. One of the principal reasons why the owners of these vessels in the South American trade have not been tempted by the much higher freight rates to Europe appears to be that the relations of these lines with South America have been so long established. In many cases certain fleets of this merchant navy have been identified with this commerce for years. Their owners therefore feel that it would be a shortsighted policy for them to risk their long-standing relations with their old customers in South America and the United States for the sake of grasping the great but temporary profits that may be made now in the carriage of goods to Europe. The same policy is being adhered to by some of the lines that have been trading for years with Australia, the Far East and other parts of the globe far from the scene of the present hostilities.

The conditions of the Atlantic trade are largely the result of the enforced withdrawal of a very large number of vessels. What this shrinkage in tonnage has amounted to since the beginning of the war is indicated by reports made to the Secretary of the Treasury of the United States, which show that German and Austrian vessels interned have an aggregate tonnage of 3,507,321 tons, while British ships taken under Government charter amount to 1,700,000 tons. All told, up to the present writing, there have been destroyed or seized 595,683 tons. The war, therefore, has taken from the seas ships measuring 5,803,014 tons.

The first of last August the total gross steam tonnage afloat, aside from that under the American flag, was 45,400,000 tons, nearly half of which was under the British flag. The American tonnage, in the aggregate, is very large, but it is mostly employed in the lake and coasting trades, there being but 15 American built vessels of 1,000 net tons or more regularly engaged in ocean transportation. They aggregate about 164,500 tons.

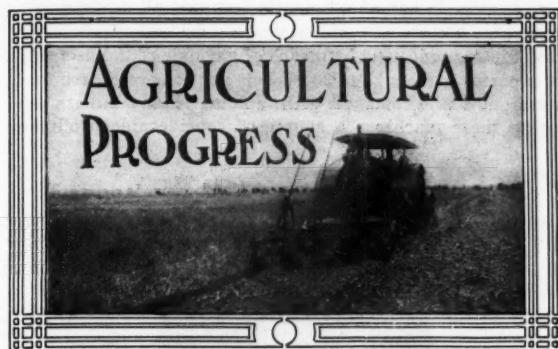
The foreign built tonnage admitted to American registry for foreign trade under the act of August 18, 1914, comprised, up to January 30, 1915, 123 vessels of 455,021 gross



*Another type of steamer of the United Fruit Company's fleet plying between the West Indies, Central and South America and the United States*

tons. Most of these regularly ply to Central and South America, and a comparatively small proportion is engaged in trans-ocean traffic. Among them are about 30 oil tank steamers that carry petroleum or its products to all parts of the world.

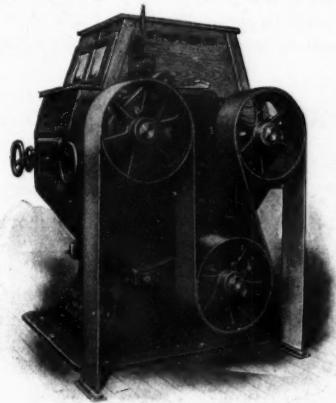
Excluding fishing and whaling vessels, the total American steam tonnage registered for the foreign trade on June 30, last, was 868 vessels, of 720,609 tons gross. Through the additions under the act of August 18, this total has been raised to 991 vessels, of 1,175,630 gross tons. There have been built in the United States since June 30, 1914, two boats of 9,813 gross tons, making a total of 993 vessels of 1,185,443 gross tons, which constitute the fleet of American steam vessels registered for the foreign trade up to January 30, 1915.



## MODERN MILLING MACHINERY

Simple, but very efficient self-contained plants that offer great possibilities for profit

HERE is a good market everywhere for flour, because its consumption is well nigh universal. Even the countries whose staple grain is rice import large quantities. The production of flour has always been one of the most important industries of the United States, the output averaging considerably over 100,000,000 barrels per annum. The superior quality of American flour has created a great demand for it abroad, and, with the exception of a few countries which are themselves large producers, there is probably no market of any prominence where it will not be



Courtesy Barnard & Leas Mfg. Co.

*Ball bearings on these steel roller flour mills save power by materially reducing the friction load*

found. Before American flour began to be so widely exported every country district possessed its own mill to which the farmer sold his wheat or took it to be ground for his own use. The business, as a rule, was in the hands of the owners of these mills, and their trade was usually of a local character.

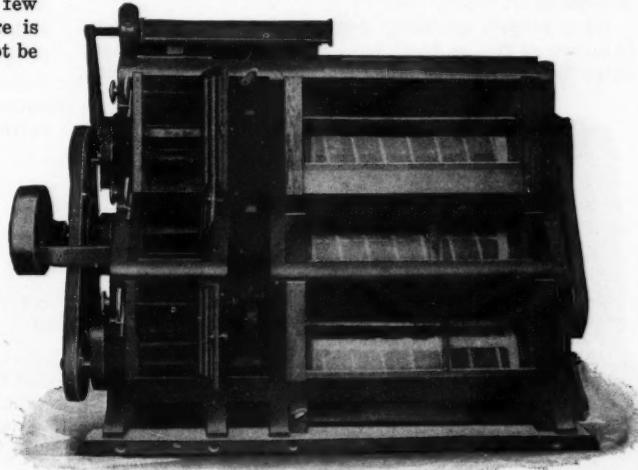
The time came, however, when the foreign consumer found that he could purchase his flour in the United States at a lower price than the domestic product, due to the wonderful extension of the wheat-growing territory in that country and the immense crops that were raised at a minimum cost. At first practically all of the exports were in the shape of wheat, the countries to which it was sent doing their own grinding and taking little in the form of flour. But the needs of a great and rapidly increasing population finally outgrew the manufacturing possibilities afforded by the local mills and attention was turned to providing means by which this work could be done more speedily and economically.

It was generally realized that the steadily expanding demand for flour, both at home and abroad, could not long be satisfied by the old-fashioned stone mills run, as a rule, by water power, which could not always be depended upon.

The appearance of the steel roller mill, apparently promised to fill all requirements, for not alone was a better quality of flour produced, but, being driven by steam, the output could be regulated exactly and there was no time or labor wasted because of lack of power. Development along this line proceeded and so many features of improvement were introduced that the steel roller mill became almost automatic in its operations. It was not long, therefore, until the mills employing stones for grinding were eliminated as serious competitors.

It was soon discovered that many economies could be effected by concentrating the industry, and some of the largest mills in the world were erected in the center of districts where an ample supply of wheat could be assured. So large were these plants, many of them having a capacity of over 10,000 barrels per day, that the cost of production was reduced until it was found cheaper in many instances to ship the finished product than the grain, and this accounts for the steady growth in the exports of American flour.

The most important factor in the creation of these gigantic mills is the fact that so many automatic features have been incorporated in them that the outlay for labor is very slight, and while small plants have always possessed numerous advantages, this feature alone, until recently, militated against them. A short time ago, however, there was exhibited at a millers' convention held in the United States



Courtesy Anglo-American Mill Co.

*This view of the three-roller mill, described on the next page, shows the easy accessibility of all its parts*

a small concentrated milling plant that seemed to promise a revolution in the industry. Every visitor was interested in this wonderful little mill. They saw the wheat flowing in at one end and a steady stream of the best quality flour running from the other. Then they ate with enjoyment the bread, buns and cake into which the latter was immediately made.

The greatest merit of the new mill, two illustrations of which accompany this article, is the extremely low cost of operation, the reasons for which are the moderate price at which it is sold, the small amount of power required and the fact that only one man is needed to run the entire mill. It is said that any intelligent man, without any experience whatever, can care for one of these mills and produce good flour, and at the same time have plenty of time to attend to customers.

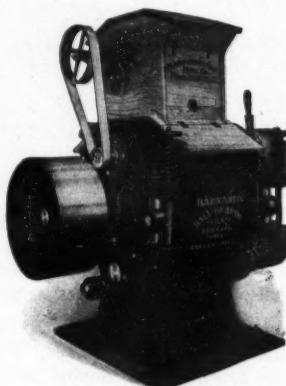
The method of making flour employed in these mills is that of quick but gradual reduction by means of two corrugated rolls of special design, which break down the wheat and clean the bran. After passing through these rolls the stock drops on to a vibrating sieve scalper. That which passes through this sieve is conveyed into the first break centrifugal reel, where all of the flour made on the

first break rolls is bolted out and falls into the hopper underneath the centrifugal reel section. The remaining operations are equally simple and entirely automatic, while an additional advantage is that the final product can be sacked off in as many different grades as may be desired, depending upon the miller's trade, whether he has a demand for a straight, patent or second grade. With slight adjustments these mills can also be used for grinding other kinds of grain, producing flour of excellent quality from buckwheat, rice, rye, etc.

That the new mills are thoroughly practical and offer opportunities for very satisfactory profits is indicated by their installation in numerous localities, in all of which they are reported to be in successful operation. In the first place, the product is fully equal in quality to that of the large mills. This is an absolute necessity, because the public taste has been so educated of late that nothing but the best will be accepted in the majority of cases. Next, they possess the great advantage of being able to obtain their supply of raw material from local sources, and as the demand is also local, they are saved the expense of hauling the grain for a long distance to the mill as well as the charges for the return of the flour. Besides this, the satisfaction of knowing the source of production is a factor of no small importance in stimulating consumption in the vicinity of the mill. These mills are made in three sizes, their capacity being respectively 12, 25 and 50 barrels in a run of ten hours.

Many persons operating these new mills and doing what is known as custom trade have found that a good demand exists for a fine meal made from corn, oats, barley, etc.,

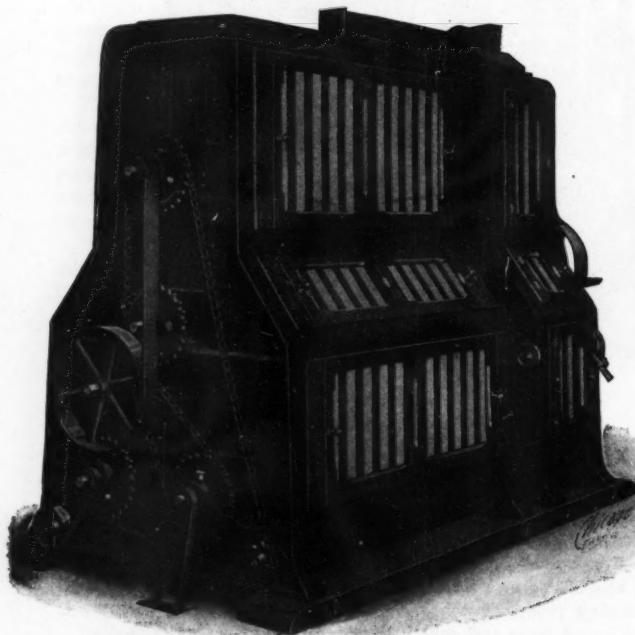
it is capable. It has an automatic feed and all adjustments as regards the fineness of the product desired can be made almost instantaneously by means of a couple of handscrews. Its capacity is from 20 to 30 bushels per hour of coarse feed and from 8 to 12 bushels of fine flour. Many millers are finding these machines a source of considerable profit as



Courtesy Barnard & Leas Mfg. Co.

*The only attendance needed by this compact little feed mill is oiling once or twice a year*

they can be operated in connection with the flour mills above referred to without the employment of additional help, owing to the fact that they practically take care of themselves during the process of grinding. Any kind of power can be used in connection with these mills, gasoline, kerosene, steam or water, as may be most convenient.



Courtesy Anglo-American Mill Co.

*A type of the modern steel roller mill which is more economical and produces more flour of a better grade than the old stone mill*

and have installed as an adjunct to their business a mill that will finish up this product at one operation. This is a light running three-roller mill selling at a very moderate price, but of immense capacity and extremely simple in design and operation. As can be seen in the accompanying illustrations it occupies only a small amount of space and is of very heavy construction. The corn or other grain drops from the hopper on to a large center roll, and then passes between two small rolls. The large roll moves two and one-third times faster than the small rolls, thus granulating the material instead of mashing or crushing it. The great merit of this mill is the wide range of work of which

## THE FARM IMPLEMENT CATALOGUE

Its vital importance to the dealer in agricultural machinery as an aid to his business

TILLING the soil is every year becoming more and more of a competitive business in which those who would succeed must employ the best and most efficient of labor and time-saving devices. Fortunately for the agriculturists all over the world, the manufacturers of farm implements, particularly in the United States, are continually improving their product. These improvements are taking in every line of tools and machines used in preparing the soil and for tilling and harvesting the crops. These advances are in employing stronger materials, simplifying mechanical details, in devising new machines for special purposes and in increasing the efficiency of existing models.

The busy agriculturist has no time to make a careful study of farm implement catalogues. He must have the new things brought to his attention and their advantages explained. This is peculiarly the province and the duty of the local dealer in agricultural tools and machinery. The farmer naturally turns to him, first of all, for the solution of problems of tillage, so far as this can be accomplished by new or better implements.

It is quite important, therefore, that every dealer in farm tools or machinery should secure and keep on file a varied assortment of catalogues relating to this line. Those who have not given careful study to American agricultural implement catalogues will be surprised at the wealth of information they contain. They are handsomely illustrated, and the descriptions of the devices are clear and complete. Most of them give all the necessary details regarding net and shipping weights, measurements and other things that the importer needs to know. Generally, these catalogues may be had in one or more languages beside English, for American agricultural implements are in use in every country in the world. Requests to the advertisers in this line in DUN'S INTERNATIONAL REVIEW will meet with prompt and full responses.

## THE PANAMA-CALIFORNIA EXPOSITION AT SAN DIEGO

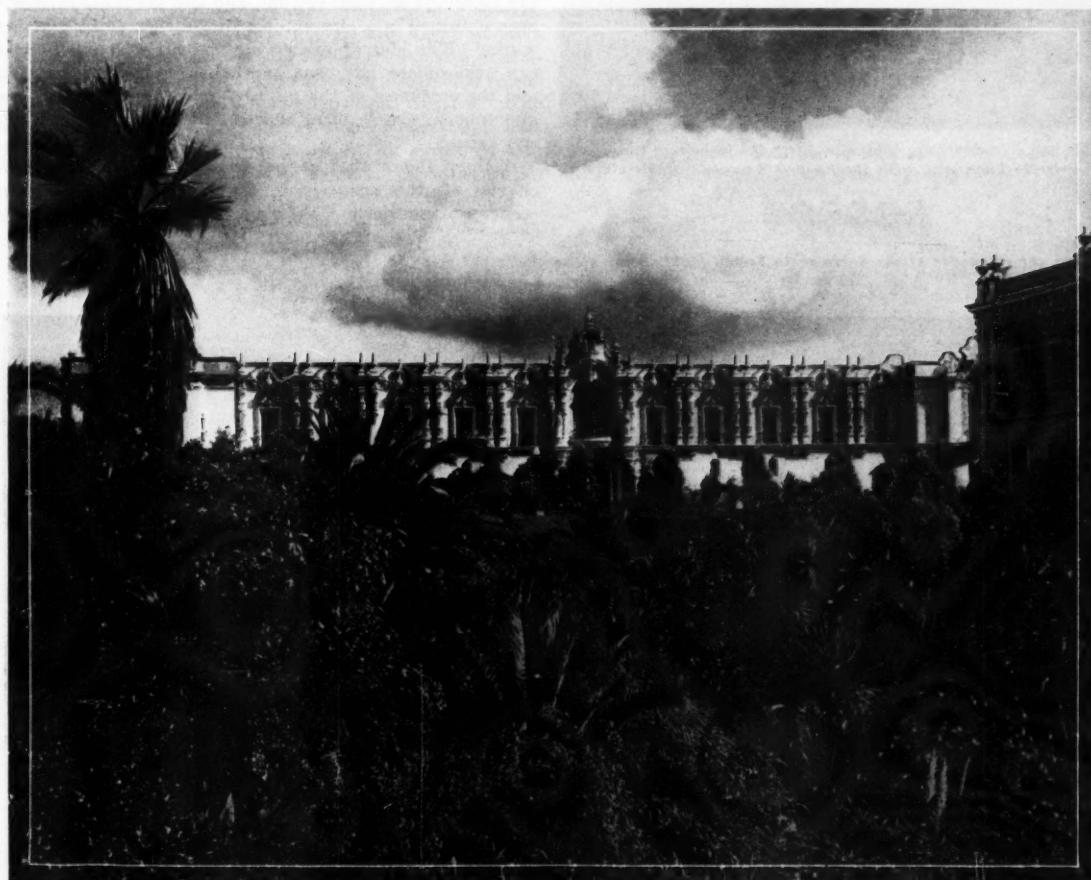
Opening January 1, 1915, Completely Finished and Free from Debt,  
this Unique World's Fair is to Continue Throughout the Entire Year

*All photos copyrighted, 1914, by Panama-California Exposition*

At exactly midnight of New Year's Eve (Pacific Coast time), President Wilson pressed a button in the White House at Washington as a signal for the formal opening of San Diego's Panama-California Exposition, while the guns of the battleships in the harbor overlooked by the exposition grounds boomed a salute in honor of the occasion. For some time prior to the opening exercises everything connected with the exposition grounds and buildings had been completed—a feature said to be unprecedented in the history of World's Fairs. Even more remarkable is the fact that the exposition opened entirely free from debt. When the great undertaking was first inaugurated, nearly five years ago, it was decided that all bills should be paid as the work progressed and this policy has been firmly adhered to. This would have

as the founder of the exposition, was nearly three years in convincing his fellow townsmen that his dream of a Panama-California Exposition at San Diego could be made a practical reality, but finally the idea was adopted with such enthusiasm and earnestness that not only has a \$5,000,000 exposition been built and paid for, but its success—from every standpoint—seems to be practically assured.

Of its artistic success there can be no question whatever. The accompanying illustrations are alone sufficient to prove that. The organizers of the exposition had in their favor three factors, each of which they shrewdly utilized to the utmost. The first of these was the wonderful climate of southern California. At San Diego it is literally "June all the year around," as far as atmospheric



*The sub-tropical climate of Southern California affords the San Diego Exposition a gorgeous natural setting of luxuriant vegetation. The illustration shows the Palm Jungle, with the San Joaquin Valley Building in the background.*

been an extraordinary achievement for any city, however large and wealthy, but for a comparatively small city like San Diego to accomplish successfully what few communities would have dared to attempt has won—and deserves—the admiration of the entire country.

The inception of the great undertaking was due to the optimism of Col. D. C. Collier, its President, and the energetic board of organizers and directors with whom he was associated. Col. Collier, who is justly looked upon

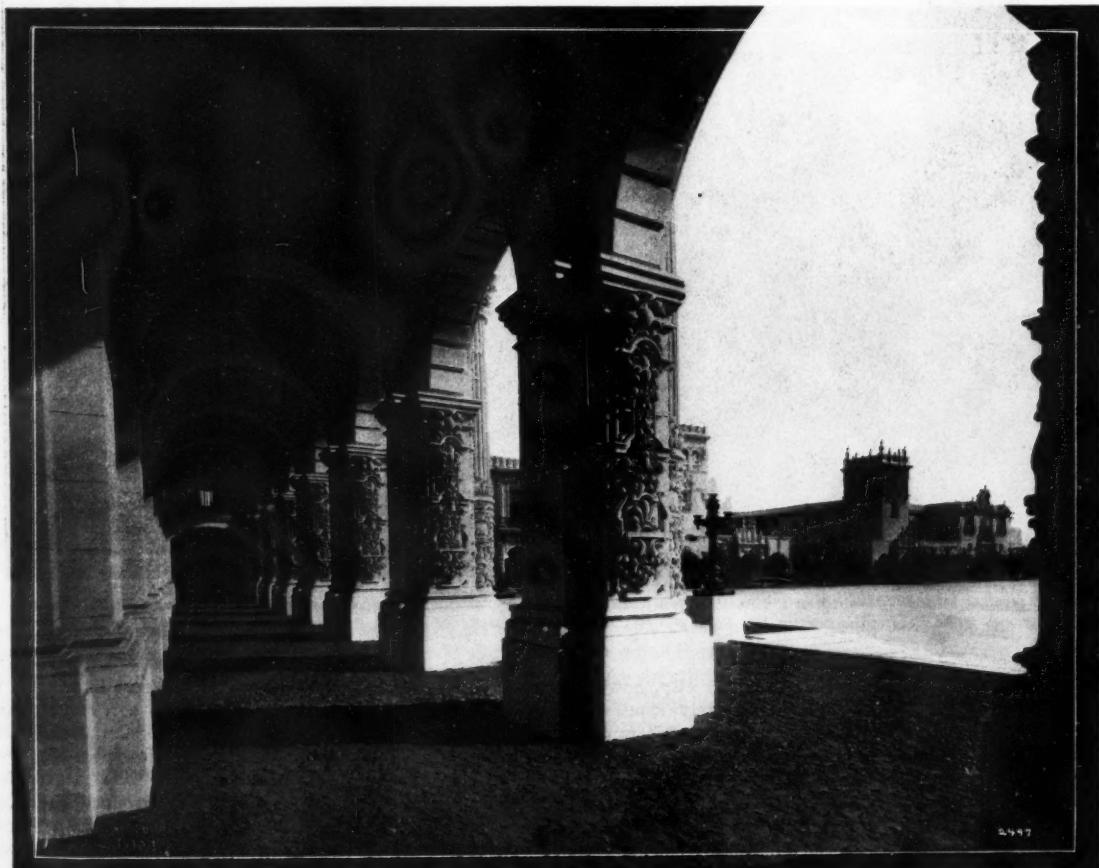
conditions are concerned. There is no frost in winter, no protracted rainy season, no gales or other storms, and no severe heat in summer—thanks to the steady sea breeze. This made an all-year exposition possible, with outdoor exhibits of the utmost variety. The sub-tropical temperature also made it possible to produce the most gorgeous floral display ever seen, and to plant and bring to successful maturity groves of oranges, lemons, peaches and apricots, vineyards and even a tea plantation.



*Guards and attendants are appareled after the fashion of Old Spain in order to harmonize with the Spanish-American architecture*



*From the colonnade of the Sacramento Valley Building the visitor looks out across a broad sunlit plaza. Such open spaces are a characteristic—centuries old—of every Spanish and Latin-American city*



The second factor, that gave to the architects and artists of the exposition much of their inspiration, was the romantic history of southern California. In this region are found the remains of the cliff dwellers, while here also lived the Navajos and several other picturesque Indian tribes. At San Diego was established the first of the famous Spanish missions which were built along *El Camino Real*, "The King's Highway." It was in "the Harbor of the Sun"—as the harbor of San Diego is sometimes called—that the caravel of Cabrillo dropped anchor in 1542, and it is on the tableland or *mesa* overlooking that harbor that the exposition buildings have been erected. What could be more appropriate than that these should follow in their architecture the charming designs of the early Spanish missions and the famous cathedrals and palaces of old Spain? This was exactly what the organizers of the exposition wisely undertook to do, and the result is a group of structures of unusual harmony, when considered in their relations to one another, and of extraordinary architectural beauty when studied singly or in detail. Many of the archways, portals, towers, and other architectural features of these edifices are replicas of some of the most famous masterpieces of Spanish architecture. In the landscape gardening of the grounds, palms and semi-tropical plants predominate, thus giving the buildings an ideal setting, and one that could not have been obtained in a city subject to the rigors of a northern winter. The idea of preserving the early Spanish-American atmosphere has been carried even further than this and the costumes of the guards and attendants, both men and women, are faithful reproductions of Spanish-American types.

A third factor that served to still further enhance the charm of this exposition was the beautiful natural scenery of southern California. From the towers of its

palaces the visitor can see San Diego's beautiful curving harbor on one side, and on the other the view extends across a rolling country to the peaks of the San Bernardino range, far to the eastward. Within the grounds nature and man have co-operated to create landscape vistas of almost tropical luxuriance, while one of the exhibit spaces has been transformed into a miniature reproduction of the "Painted Desert" of the Southwest.

In conformity with the historic idea that was constantly in the minds of the organizers of the exposition, its nomenclature is wholly Spanish and reminiscent, for the most part, of the early days of California's discovery and settlement. Thus the chief exposition street is called *El Prado*, after the famous boulevard of Madrid. In the big Spanish buildings along the Prado are assembled the principal industrial exhibits. Here too, has been carried out a new idea with a view to make each exhibit interesting. The exhibits are not competitive, but there is one from each industry, the best obtainable, and instead of showing the product of this or that manufactory, there is shown the process of manufacture—not a carpet, but the making of a carpet; not a metal utensil, but the making of that utensil—so that products which are seen every day, and in themselves are not particularly interesting, are made interesting by showing how they are made.

The Japanese exhibit in the Foreign and Domestic Arts Building, for example, is not an idle array of silks and lacquer. It consists of Japanese artists and craftsmen weaving their hemp, embroidering their marvelous silks, carving their exquisite woods and ivories. The Russian peasants are at work at their Koustarnyi arts. The Italian craftsmen are at work at their cameos and glass-cutting. There is the same spirit in the other buildings, more or less marked, with everywhere the effort to show movement and progress.

*Looking westward from the Commerce and Industries Building the visitor is impressed with the beauty and dignity of the edifices, their harmonious coloring and the appropriateness of their setting*



*Colonnade of entrance to the building devoted to Commerce and Industries at the San Diego Exposition*

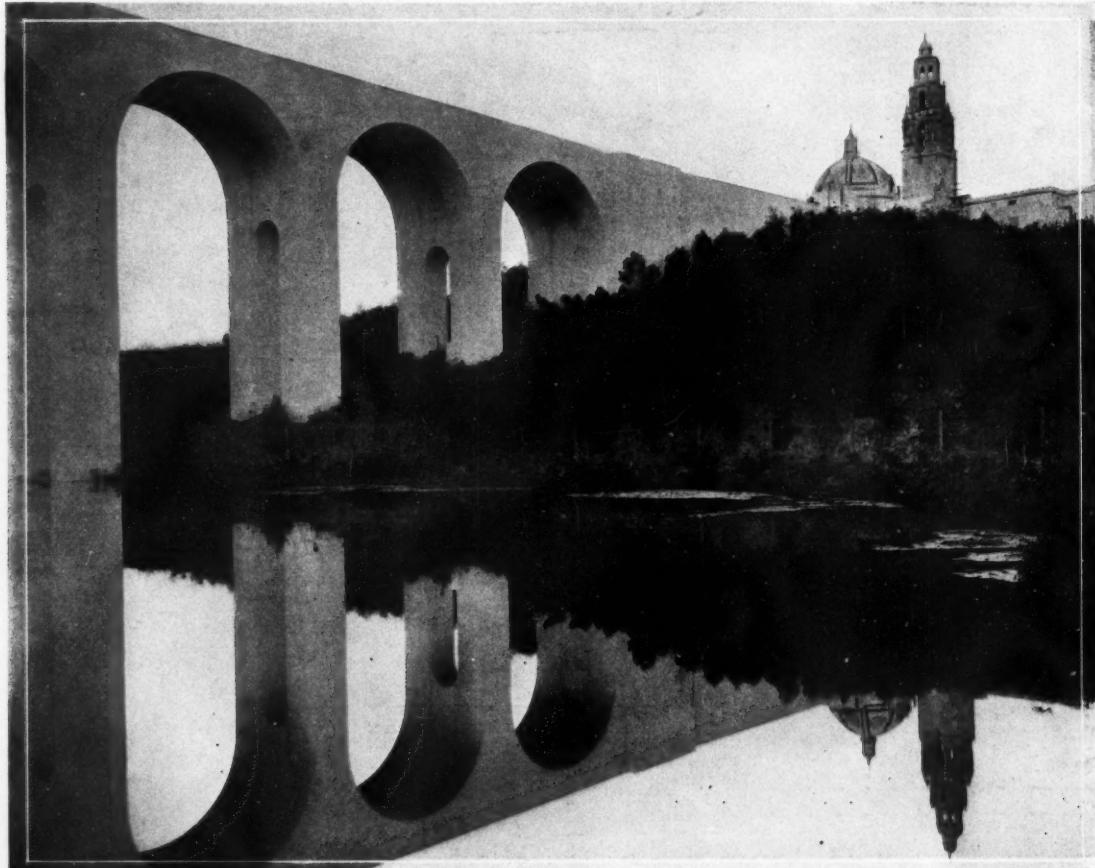




*Looking westward along the Prado—the main thoroughfare, named after Madrid's famous street*



*The view from "La Laguna de Cabrillo," a lake named after Juan Rodriguez Cabrillo, a famous Portuguese navigator of the sixteenth century who, while in the service of Spain, explored the Californian coast, and died at San Bernardo in 1543*



In the case of the outdoor agricultural display there is an equally sharp difference between this new type of exposition and the old type of world's fair. The man who saw the exhibit of agricultural implements in the past saw a great hall of machinery where the different machines stood idle. Unless the visitor was something of an expert he studied nothing, and experts were so few that the bulk of the visitors fairly ran through without pause. There is a display of agricultural machinery at San Diego, but the bulk of it is displayed in an open field, up and down which move the giant tractors, the plows and cultivators, the reapers with the power of a hundred hands. And the visitor who would not spend a minute looking at the old style exhibit will look for a long time at the new style. The man who is entirely unimpressed by the sight of a sheaf of wheat or a sack of rye flour, is very much interested in seeing how the wheat is sown and cultivated and harvested and finally brought to the consumer by the most improved methods. If he is a farmer he will see how modern progress has simplified his work. If he is a city man with leanings toward the land he will see for the first time what modern invention is doing to help make the cost of living lower.

Down the Alameda lie the outdoor exhibits of other industries, still showing the processes by which they extract their oils or other products. There is the first outdoor automobile show in history, made possible by the climate which allows an all-year outdoor display.

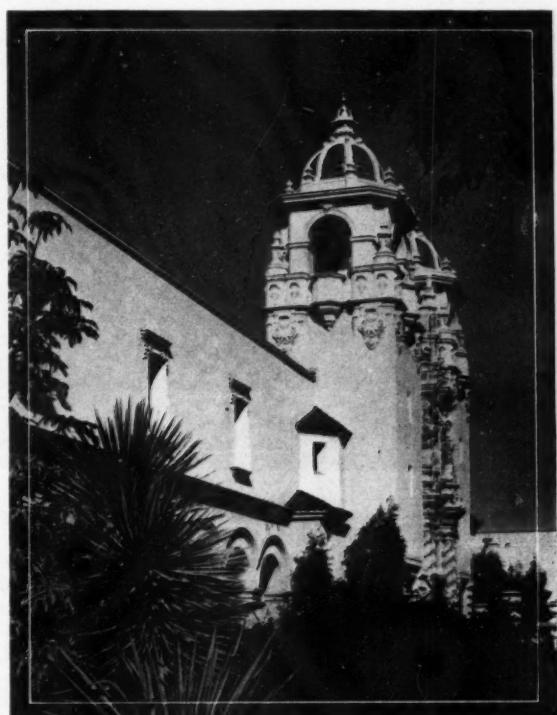
Another interesting outdoor exhibit is the model intensive farm—a five-acre tract where peach, cherry, pear, apricot and walnut trees have been set out and are already bearing, while beneath them the visitor will find row after row of vegetables, planted close together and bearing in profusion. Near this model farm is the

orange display—not a stack of oranges, as at previous world's fairs, but a real citrus orchard where orange and lemon and grapefruit and kumquat are blooming and bearing, trees selected from the best orchards of California and brought to the exposition as the most graphic way of displaying this great industry.

Adjoining is the tea exhibit, not one of boxes and cases, but of tea plants growing and bearing, brought over from Ceylon in care of Singalese nurserymen who remain to tend the plants, to gather and cure the leaves and turn them over to the Singalese girls who will serve the beverage in a little building at the center of the plantation.

One of the most conspicuous of the buildings along the Prado, or main street of the exposition, is the California State Building which contains, among other exhibits, one of the rarest collections of ancient Indian relics ever brought together. A separate building is devoted exclusively to Indian arts, while the "Painted Desert," already referred to, is an enclosure of some seven acres comprising several Indian villages, and portraying the Indian life of the Southwest as it has existed for centuries.

Many, if not all, of the counties of California are represented by separate pavilions, in each of which are collections of natural products and other exhibits showing the immense resources of these regions and their attractions to the tourist or settler. Figures prepared by the exposition authorities show that there are at the present time 8,000,000 acres of land under cultivation in the Southwest, producing crops valued at \$143,000,000. The mineral output of this region is almost as great in point of value, namely \$135,000,000; while there are also large shipments of cattle from the same districts. Government reports show that there are 44,000,000 acres of land capable of cultivation and just as good as the 8,000,000 acres now under cultivation. If this immense area of potentially



*The old California missions were noted for their sweet-toned bells, some of which are among the features of the Exposition*



*The pool by the Botanical Building is one of the beauty spots of the San Diego Exposition that reveal themselves unexpectedly to the visitor and emphasize the wealth of Southern California's vegetation*





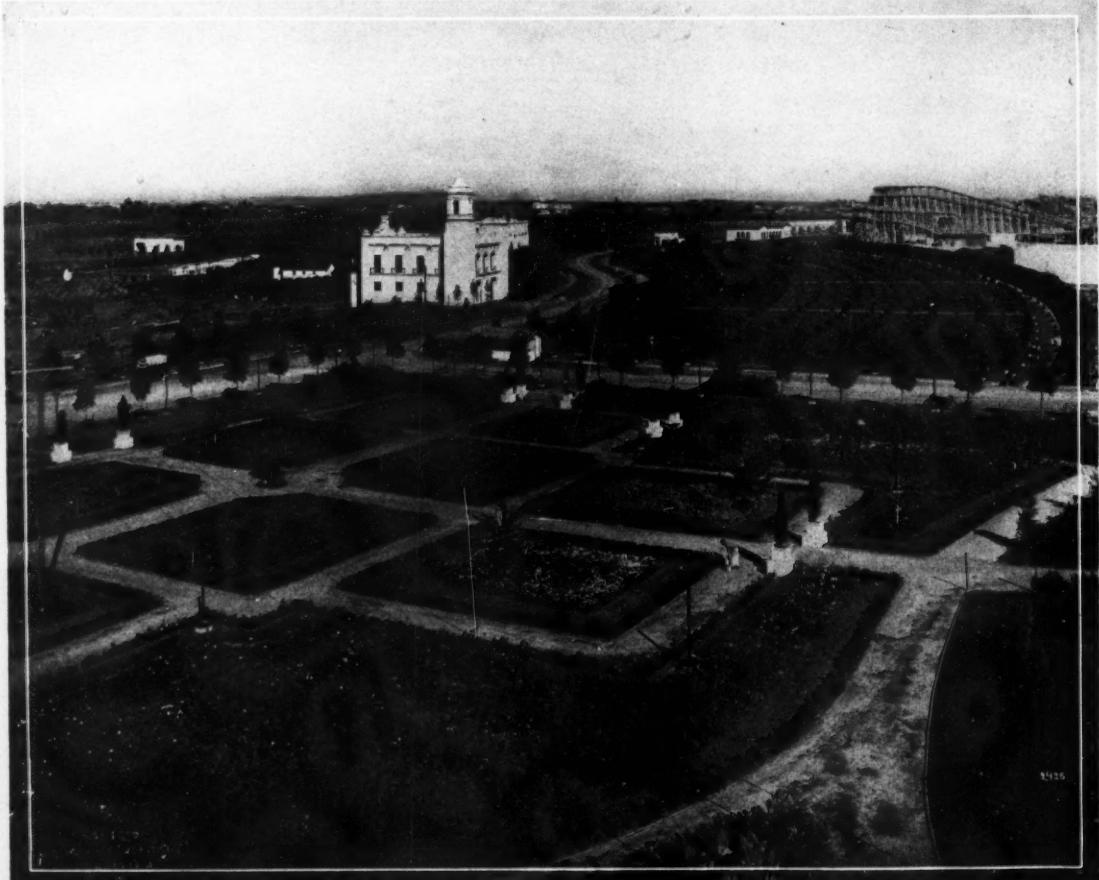
*A view of some of the Exposition buildings from the western gateway of the grounds, "La Puerta del Oeste," giving the observer the impression of an ancient Spanish city*

arable land should be divided into homesteads and planted to crops it would yield nearly \$600,000,000.

San Diego is about 125 miles distant from the City of Los Angeles, with which it is connected by a direct line of railway and the people of the larger city are almost as keenly interested in the success of this Southern California World's Fair as are those of San Diego itself. Visitors to the San Diego Exposition will naturally include Los Angeles in their itinerary and will find much to interest them in each of these two enterprising cities. A brief description of both cities is therefore included in this number, and it is hoped that most of the visitors from

across the Rocky Mountains, or from foreign lands, who attend "The Exposition Beautiful" at San Diego this year will also plan to make a more or less extensive tour to many of the points of interest in this part of the Golden State. For a time it was feared that the great war in Europe would render the holding of the Pacific Coast expositions at San Diego and San Francisco impossible, but it now seems probable that the result will be exactly opposite from what was anticipated, and that tens of thousands of tourists who ordinarily spend their summer vacations across the Atlantic will plan this year to spend them on the Pacific Slope.

*The agricultural exhibit constitutes a very important part of the San Diego display. The illustration shows one of the gardens and the citrus orchard where visitors from the North will see many sub-tropical fruits growing in their natural state*





*The skyline of Los Angeles, the chief city of Southern California and the commercial metropolis of the southwestern section of the United States, which in the last 30 years has grown from 11,000 to more than 500,000 population*

## THE CITY AND PORT OF LOS ANGELES

**The Metropolis of Southern California which has Increased Its Population from 10,000 to 550,000 in Thirty Years**

*Illustrations loaned by Los Angeles Chamber of Commerce—Data regarding port supplied by Clarence H. Matson, of Los Angeles*

WHEN Richard Henry Dana cruised the blue Pacific in 1835, the vessel on which he sailed anchored in an open roadstead off the southern California coast. It was a bay with a crescent shaped shore, open to the south, but protected from southwesterly winds by what has since become known as the Magic Isle of Catalina. Mud flats and a spreading lagoon stretched away several miles to the interior, while on the left a high hill sloped down toward the shore, ending in a precipitous bluff at the water's edge. On this bluff was a single one-room structure, used to store hides and merchandise, and for lodging when any

one came from the interior to trade with a vessel. Concerning the port, Dana wrote in "Two Years Before the Mast":

"I learned to my surprise that this desolate looking place furnished more hides than any port on the coast. It was the only port for a distance of 80 miles, and about 30 miles in the interior was a fine plain country, filled with herds of cattle, in the center of which was the Pueblo of Los Angeles—the largest town in California—and several of the missions; to all of which San Pedro was the seaport."

*One of the most attractive features about Los Angeles is the system of perfectly paved, tree-bordered thoroughfares that lead from the city and the suburbs out into the country. They and the wonderful climate give an added zest to motoring*



Dana visited the place again nearly a quarter of a century later, and at that time he wrote:

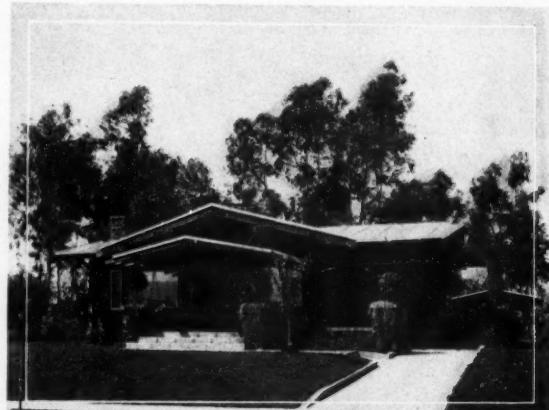
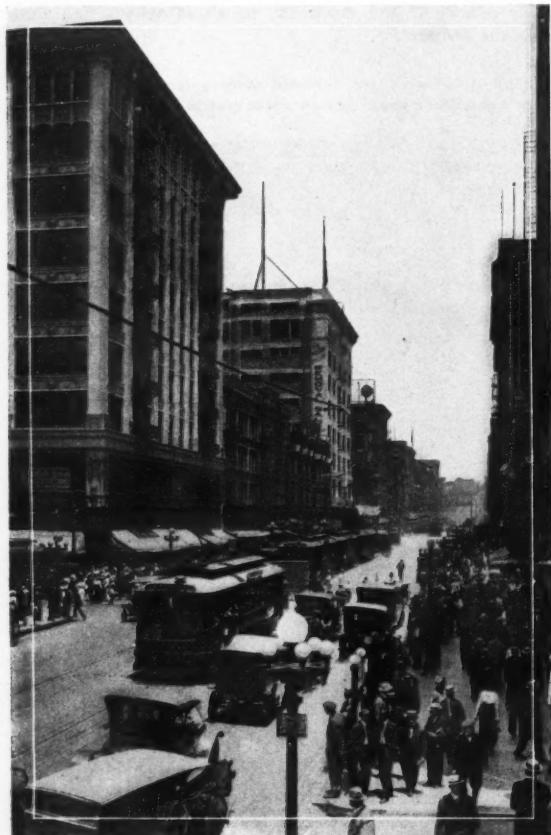
"I could scarcely recognize the hill upon which we rolled and dragged and pushed our heavy loads. It was no longer the landing place. One had been made at the head of the creek, and boats discharged and took off cargoes from a mole or wharf, in a quiet place, safe from the southeasters."

This is where the port of Los Angeles of the present day is located—a modern harbor, built to order along the most improved engineering lines.

The City of Los Angeles proper is located about 22 miles from the port and was founded in 1781 by a small band of Spanish-American colonists from Mexico. Fifty years later the population of the place was only 770 and in 1847 only 1,500. By 1880 the population had increased to a little over 10,000 and then began a period of growth that has made this one of the wonder cities of America. In 1900 the population was 102,479; in 1910 it was 319,198, and at present it is estimated to be between 550,000 and 600,000, while every resident expects that it will pass the million mark before the next decennial census. The period of rapid growth really began on November 9, 1885, when the last spike was driven in the Atlantic and Pacific Railway, a new overland route across the continent. At present the city is reached by five transcontinental lines, three lines to San Francisco, one through the San Joaquin Valley, another along the coast southward to San Diego—or more than a dozen altogether.

In addition to these steam railroads, Los Angeles is the center of a remarkable system of urban and suburban electric railways, the former aggregating 365 and the latter over 1,100 miles of track. For some years past the city has been the scene of remarkable building activity, leading all the cities of the United States in the number of building permits and usually ranking about fifth in point of value. The value of the permits issued during

*A view northward from the corner of Fifth Street and Broadway,  
Los Angeles*



*The mildness of the climate is a continual invitation to life in the open air, and bungalows are popular*

the year 1913 was officially reported at \$31,641,921. Bank clearings the same year aggregated \$1,211,168,989, and in 1914—despite the worldwide depression of the last few months—the total clearings amounted to \$1,145,167,100, a falling off of only 5½ per cent. There are now no less than 2,300 manufacturing establishments in Los Angeles, the total value of the products in the year last reported being \$157,172,000.

The public improvements carried out by the municipal government of this enterprising city have been on a scale commensurate with its growth and mercantile importance as the metropolis of Southern California. Twenty-five years ago the city did not have a single paved street—today there are 726 miles of improved streets and 585 miles of sewers. A year ago the city completed a system of water supply that is in many respects one of the most remarkable ever undertaken by any municipality. At a total cost of about \$23,000,000, a supply of 258,000,000 gallons per day has been brought to the city from the slopes of Mount Whitney, a distance of nearly 250 miles. The water flows through 47½ miles of tunnel, 14 miles of siphon, 103 miles of lined and covered conduit, 40 miles of open lined conduit, and 21 miles of open unlined canal. It is estimated that the surplus water of the aqueduct will provide for the irrigation of 135,000 acres of land contiguous to the city, while the generation of power from a fall of 1,500 feet in the aqueduct will supply a maximum total of 125,000 horse-power, the greater part of which can be developed within 47 miles of the city.

Los Angeles is the center of one of the most important petroleum fields in the world, the total output for the State aggregating over 90,000,000 barrels per annum. All of this is produced in the southern part of the State and most of it comes to Los Angeles for refining and shipment. The city is also the headquarters for the rich mineral fields of Southern California, while the vast agricultural and horticultural richness of this region is well known.

To readers in other lands perhaps the most interesting of the many activities of this remarkable city are those connected with its fast growing port. Where Dana's vessel anchored in 1835 is now a broad harbor of refuge and commerce, protected by a great breakwater more than two miles long, which was built by the United States Government at a cost of \$3,100,000. This is the Outer Harbor of Los Angeles. Extending half a mile into this protected harbor are solid earth-filled piers faced with wharves, some of which are the best that engineering skill could devise. There are more than one and a half miles of these wharves now built on the Outer Harbor, with from 30 to 35 feet of water in front of them. Any vessel sailing the Pacific can round the breakwater in any kind of weather, day or night, at any stage of the tide, and moor at a wharf under its own power within twenty minutes from the time it leaves the open sea.



*That it is a city of beautiful homes is one of the first impressions that the visitor to Los Angeles receives*

Near the landing "up the creek" which Dana found on his second visit, are now municipal wharves with 34 feet of water in front of them at low tide, at which was docked the first great vessel bringing a cargo of merchandise through the Panamal Canal—the American-Hawaiian liner "Missourian"; while "the creek," of which Dana spoke, is now a channel, several miles long, lined with wharves and accommodating ships from many lands, and served by two transcontinental railroads. In the last five years the City of Los Angeles has voted \$5,500,000 for harbor improvements, and it stands pledged to spend a total of \$10,000,000 by 1919. The United States Government has expended about \$5,600,000 since 1871, of which \$3,100,000 was for the construction of the great breakwater, and the balance for jetty work and dredging.

Because of the curvature of the earth, the port of Los Angeles lies only 70 miles from the Great Circle Route between the Panama Canal and the Orient. This means that not only the shipping passing through the canal and to or from the North Pacific Coast, but also all that commerce using the most direct route to and from the Orient, will pass directly by the door of Los Angeles, and naturally will make it a port of call. In addition to that, Los Angeles is nearer by rail to most of the intermountain region and the Middle West than is any other port. It is farther east than Reno, Nevada. Thus passengers arriving at Los Angeles harbor for Salt Lake City, can be at their destination by the time they would reach San Francisco if they landed through that port; and the same fact holds relatively true of freight service. The construction of the Panama Canal has given a remarkable stimulus to water transportation, with the result that Los Angeles, with its 600,000 people, is building itself a great modern port for the use and benefit of the whole southwest.

In 1912 Los Angeles became the greatest import lumber port in the world, receiving in that year 720,883,630 feet of lumber. This was not only used in the great amount of construction work in the city and the surrounding territory, but also in the mines of the southwest and of northern Mexico.

The net tonnage of the ships entering the harbor increased from 356,371 tons in 1902 to 2,759,274 tons for the fiscal year ending June 30, 1914—just before the opening of the Panama Canal. In the same period the merchandise tonnage of the port, exclusive of lumber, increased from 14,167 tons in 1902 to 693,479 tons in 1914. The total tonnage of all commodities for the fiscal year ending June 30, 1914, was 1,682,794 tons, with a value of more than \$80,000,000. The opening of the Panama Canal greatly increased this tonnage, especially of general merchandise.

In 1906, by which date the growth of the city had become so rapid that larger shipping facilities were urgently needed, the municipality began to devise plans by which it

might expend its financial resources in port development, and to that end it extended its boundaries to tidewater, touching the harbor municipalities of Wilmington and San Pedro. This was accomplished by annexing a strip of land a quarter of a mile wide and about 15 miles long. Legal difficulties stood in the way of annexing the harbor towns, however, which were not removed by legislation until 1909. A consolidation plan was effected and ratified by the three municipalities, under which Los Angeles agreed to spend \$10,000,000 in ten years in harbor improvements, and in August of that year the two harbor towns became a part of Los Angeles by a vote of the people.

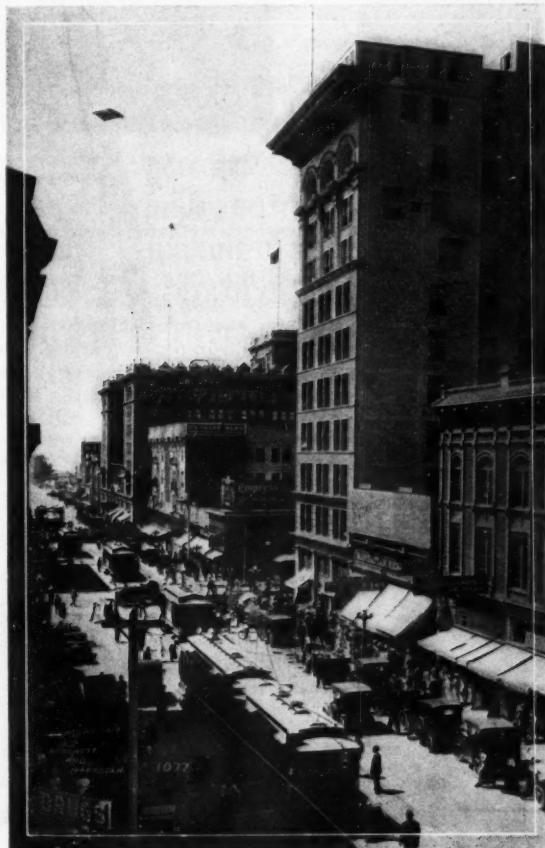
The first bond issue of \$3,000,000 for harbor work was voted in 1910, but owing to litigation the money was not available until April, 1912. In the meantime, however, preliminary work was done, and as soon as funds became available, dredging channels, reclaiming submerged lands, building wharves and freight sheds, and opening and paving streets to the waterfront actively began. Over 1,600 feet of wharf was completed at Wilmington in 1914.

Los Angeles voted its second installment of harbor bonds, \$2,500,000 in 1913, making \$5,500,000 to date. By September, 1914, there were 5,575 feet of municipal wharves completed, with others contemplated. There are at present 3,825 feet of freight sheds, 100 feet wide, fully completed, together with necessary rail terminals and paved streets. There are also 9,625 feet of wharves operated by railroad companies; 9,060 feet operated by private wharf companies, and 6,160 feet by lumber companies.

The government of the port is municipal, as the City of Los Angeles, through its Board of Harbor Commissioners, has control of all port charges, including pilotage, and also controls public tidelands for industrial and commercial purposes.

*A street scene in the business section of San Diego—looking down Broadway from Sixth Street*

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## THE CITY OF SAN DIEGO

### Its Magnificent Harbor, Delightful Climate and Other Unusual Natural Advantages

**S**AN DIEGO is the first port of call on the Pacific coast of the United States for vessels coming north from Panama. It lies within 100 miles of the "great circle" traversed by ships voyaging to and from the Orient. The harbor of San Diego—wide, deep, landlocked and free from storms—is one of the finest on any coast.

Historically, San Diego stands as the beginning in California. At San Diego was planted the first cross, followed by the first church, and, later, by the first town. In 1870 San Diego's population was 2,300; it is now nearly 100,000. The remarkable enterprise and optimism of the inhabitants is evidenced by the international exposition that is being held there, during the entire current year, to celebrate the opening of the Panama Canal.

An unusually gracious climate is another of San Diego's advantages. It is neither too hot nor too cold; there are no extremes of temperature; no violent changes or atmospheric disturbances. Artificial heat is seldom needed at any season of the year. Ninety per cent. of the rainfall is between November 1 and May 1, the normal annual precipitation being but little more than 10 inches. The sun shines an average of 356 days a year. The average summer temperature is 68 degrees (Fahrenheit), and that of the winter 68 degrees. It is the boast of San Diego that it uses the shortest thermometer in the world.

Ten steamship lines make San Diego their southern terminus. At least half a dozen lines from the Atlantic seaboard of the United States and from Europe stop at San Diego at fixed intervals in their regular service. In addition to these fleets there are many steamers—some carrying passengers—going to and fro between the East

and West, with more or less regularity, via the Panama Canal, which make San Diego a port of call.

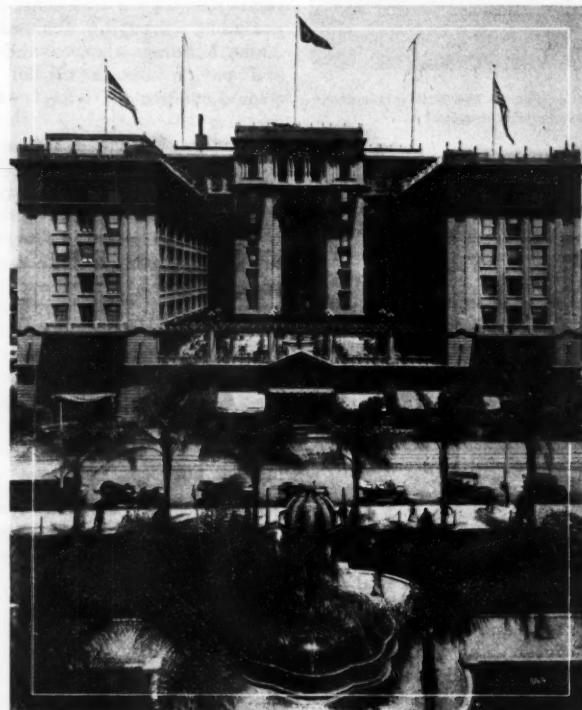
San Diego is easily reached by rail from the North or South. The lines under construction, connecting the city with other trans-continental systems, will add still further to its extensive facilities for commerce by land.

The average rainfall of the agricultural regions within 60 Miles from San Diego is 30 inches annually. There is

an abundance of water, however, and great crops are raised by irrigation. The hills rise gently from sea level to heights of more than 5,000 feet at a distance of 60 miles from the coast. From this crest the land to the east drops rapidly to the level plains of the Imperial Valley—one of the richest bodies of land in the world, comparable only to the Valley of the Nile in its inexhaustible fertility.

Magnificent highways are another of San Diego's attractions. One of these runs for 70 miles along the coast in sight of the Pacific; another connects San Diego with the great Imperial Valley. There are between 500 and 600 miles of roads that cross valleys and table lands, climbing higher and higher from the semi-tropical coast, where oranges and olives grow, to the temperate zone of apples and cherries, nearly a mile above sea level. The scenery within easy motoring dis-

tance of San Diego is remarkably beautiful. To the person who has traveled extensively, one city is much like another. San Diego, however, has many individual features and advantages that are not found elsewhere. Combined, they give the place an unusual charm whether the visitor comes for business or pleasure. The thousands of persons who visit the exposition will realize that San Diego's dreams of future greatness have a very tangible foundation.



The U. S. Grant Hotel, facing the plaza in San Diego, is one of the handsomest hosteries on the coast

*San Diego's waterfront in mid-winter. Owing to the mild, semi-tropical climate, yachting, bathing and boating are all-the-year-round features of life in that picturesque city of Southern California*





**F**EVERY new fashion represents the combined skill and effort of thousands of persons. Back of the designers are many mills and many dexterous craftsmen. In the making of textiles, an army of expert dyers is employed in working out the patterns and giving adequate form to the ideas of the artists. So far what is done with all other fabrics, no matter what material. The laces, embroidery, garnitures that enhance the beauty of the gown and of its wearer are the work of master hands. In the designing and manufacturing of apparel for men and women no other country can offer such a high development of great facilities as the United States.



*This model of green taffeta and velvet from Stewart & Co. has a military touch in the embroideries and the sash on the basque. Note the flaring collar and fur neckband; also the five-yard-around-the-bottom skirt.*

## COMING TENDENCIES IN WOMEN'S APPAREL

**French and American Designers Work Together  
to Produce Styles that are Highly  
Pleasing and Original**



*Afternoon gown of tango crêpe de Chine with soutache braiding in monotone. The blouse is of cream shadow lace—making an attractive ensemble. Gown made by Walter E. Bedell & Co. Silk by the Arohnson-Bloom Silk Co.*

A COMBINATION of the delicate, inimitable fashion spirit of France and of the practical characteristics that have made the garb of the American woman famous the world over was the striking feature of recent exhibitions in New York of the latest models in gowns which were designed and made in the United States. This came about owing to many of the New York manufacturers of women's wear having engaged the services of designers formerly connected with the leading Parisian houses. As a consequence, these new styles represented the best ideas of the best talent in the two greatest fashion centers of the world. Such an alliance and such a result never have been practicable before. Freshness and originality, therefore, are notably evident in the new creations.

In the spring frocks, especially, the spirit of youth is the dominant motif. It is expressed by airy flounces which partly veil delicate knots of ribbon placed in the foundation fabric, by ruffled dresses overhung with slight draperies, and in other ways.

Among the new models there are hoopskirt dresses whose inspiration can be readily traced back to second Empire sources, even to the wire "cage" worn beneath the expanded skirt. The fabrics employed are quite as old-fashioned as the style—which is another way of saying that both are "high novelties."

In one of these gowns the material reproduced is a quaintly striped design in a soft mouseline. The skirt is encircled with flounces, and the bodice has the characteristic kerchief drapery edged with lace. The model who displayed the gown showed that this old-time crinoline could be worn

easily and gracefully, no matter if the modern wearer were seated or standing. The panier has been revived, but it is more like a flatly posed hip apron than the puffed effects that characterized the panier two or three years ago when its revival was first attempted. In this way the upper part of the skirt remains gracefully slim, while the lower part is permitted to flare a little, but not to such an extent as to appear exaggerated.

All the new skirts are not wide. There are several models just on the market that at first glance do not seem unusual in length of hem. This effect, however, is largely due to the clever cutting of the skirt. By actual measurement it is found to be fairly wide after all, and very comfortable either for walking or dancing.

Another interesting model that has recently been evolved by Franco-American designers is a frock of black charmeuse—for youth demands black now and then because of the effectiveness of its sombre background. It is cut with a circular skirt which, however, is not permitted to hang in straight folds but is looped up at one side to form a graceful draping toward the back.

Plaited fabrics, particularly in tulles and chiffons, are becoming very popular because they give a gracefully slim line to a garment, while, at the same time, their confined fullness is an advantage for dancing purposes. Polka dots and coin spots are a feature of some of the new gowns. They are combined effectively with plain fabrics.

From these few indications, taken at random from the latest models that have been shown in New York City, it will be seen that the skirt may be circular and full; it may be straight or



pleated, or it may be gathered. The length and fullness may continue to the edge of the hem, or the skirt may be draped, or it may open over a foundation petticoat of considerably less width. The width of the skirt, therefore, may be greatest either at the hem or slightly above it. Again, the skirt fullness may be broken in tiers of flounces, either mounted on a foundation or attached one to the other in a succession of gathered, cord-edged bands. The fullness of the skirt may begin above the normal waistline, or even below it. Each innovation marks a radical change from the preceding style. It is important for every dealer to bear this in mind because nothing arouses a customer's interest in new models so much as a style revolution like this.

The use of French ideas by American manufacturers has attracted more and more favorable attention to their productions in world markets where the dress products of the United States have hitherto been little known. The creative combination gives women everywhere a wider choice, not only of styles but of fabrics, weaves and patterns. Not for many years has there been such a varied and attractive display to select from. This assembling of different ideas in the new models, and in those yet to come, is therefore a point of particular importance to dealers who are choosing their future stocks.

The garish color combinations that have been striking features of some of the Paris creations in the last three years have vanished. The tones of all the new spring shades are subdued. Blues, pinks and yellows are quiet in shading; grays have come to the front, and the tones of red used are obviously inspired by the military influence that dominates Europe. Then there are various shades of blue, from navy to Dutch; sand and putty tones continue to be popular, also grays and various "invisible" colors on

*Afternoon gown of tobacco crêpe de Chine. Note the width of the skirt, which is composed of five ruffles. The sleeves are transparent and very fluffy. Made by Walter A. Bedell & Co. Silk by the National Silk Dyeing Co.*



*From Maison Maurice comes this gown of tan crêpe de Chine embroidered with green. It is simple in line, bearing a close resemblance to a Russian Cossack's tunic and blouse. The skirt is jet pailleted, and sleeves are of transparent silk net*

the order of khaki. Battleship gray is most in fashion for street wear and lighter grays of the same tone for more dressy costumes. There are, also, soft browns, dull greens, prune purples, maize yellows, Gobelin blues, American Beauty reds and pinks in great variety.

Patterns embodying buds, blossoms and full-blown roses have a prominent position in fine materials and especially in printed effects. Checks and narrow black and white stripes are added for variety and often are associated with floral printings because of the latter's great popularity.

The return of the full skirt has resulted in the reinstatement of weaves that have been comparatively little used for some time. In silks, failles, gros de Londres and poult de soie are particularly the vogue. Taffetas are coming into wide use, and satins, crêpes, silk and wool poplins are retained as staples. Crêpe de Chine, crêpe Georgette and crêpe meteor also are popular. Tussahs, in the natural color, are seen in silk tailor-mades and in separate skirts. Gabardines, serges and poplins continue in favor.

In cotton dress goods, organdies, dotted and in floral printings, are highly fashionable. Plain, printed, embroidered and corded voiles are much in demand. The new additions to white goods are dotted swisses and dotted marquisettes which, with organdies, make up the latest novelties.

The radical change in the skirt width undoubtedly will give a great impetus to the sale of separate skirts. The circular style is not practical in loosely woven materials. Therefore such skirts are made with several seams. Novelty pleated skirts and those with yokes and panels are well regarded by the trade. They are usually mounted on a somewhat wider belt than last season, and some are finished with a girdle which produces the high-waisted effect.

## POPULAR PRICED WHITE EMBROIDERED DRESSES



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Made in 200 Styles  
\$45 to \$120 Gold per Doz.

Our extensive facilities make it possible for us to produce these creations at a very moderate price. The sales possibilities of our line are unlimited.

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No. 1864.—The attractive illustration shown herewith is a mercerized chiffon voile and burned out fancy embroidery; wide circular skirt; yoke of skirt and sleeves are made of all-over-embroidery; shadow lace collar; messeline belt in all colors. Three-quarter length sleeves. Price \$3.75.

If you are in the market for a line of cotton dresses, it will pay you to investigate our line.

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We desire to grant exclusive territory to importers of Women's Wear who have facilities for selling the retail trade.

**WE ARE CONSIDERED ONE OF THE MOST EXCLUSIVE COAT AND SUIT MANUFACTURERS IN THE UNITED STATES.**

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Samples cheerfully submitted to Jobbing Trade or Large Distributors

## BLOUSES—A STAPLE LINE FOR EVERY DRY GOODS STORE

Changes in Styles this Season Offer an Unusual Opportunity to the Retailer

**W**Omen's blouses are always in demand. The woman of average means can afford from five to a dozen a year. Those who have more money to spend buy twice as many. A new blouse is as much of a necessity as a new pair of long gloves, and very attractive waists can be had for as little as gloves cost. Even if a dealer uses only ordinary care in the selection of his stocks of blouses and only passable diligence in pushing their sale, he should have no difficulty in turning over this line at a fair profit. He should have none left over at the season's end. In fact, the distinction between seasons is usually less clearly marked in blouses than in almost any other line of women's wear.

Simplicity is the distinguishing feature of the fashion in blouses this year. Like the styles in dresses, the modes in waists are more than usually devoid of showiness and of ornate decoration. Yet they attain, by their studied plainness, an elegance that heightens their charm.

There is a wide choice of materials for blouses—fabrics that go well with the flaring, full or rippled skirt. Crêpe de Chine is one of the most popular and serviceable. It combines pleasingly with any sort of skirt and is seasonable throughout the entire year. Cotton, linen, taffeta and Georgette crêpe are also much in demand. Many of the new demi-tailored models are being made of these materials. In the more dressy waists chiffon, lace, net and Georgette crêpe are employed with pleasing effect. Such blouses are usually semi-fitted. The bolero effect is also seen in a number of new styles. Frequently the waist is finished with a girdle so that it can be worn on the outside of the skirt.

White blouses will be in the majority, especially in the popular-priced lines, for spring and summer wear. Many of these white waists have touches of color by being embroidered in putty, tan and Dutch blue shades. Others are all in white, even as to trimmings—fancy white braids, fancy crochet, pearl buttons, hand embroidery in white floss and in white lace. Among the other shades for blouse materials that have given evidence of being much in favor are sand, battleship gray and neutral tints.

In the latest models the tendency is toward full length sleeves, particularly in the blouses for spring wear. A fair proportion of those for summer have sleeves in three-quarter lengths, and some are shorter, just covering the

elbow. Long sleeves, however, are generally accepted for evening wear, although a novelty that is growing in favor is a short sleeve that is rather full and ends in a band of the same material and a ruffle of lace. This, however, is used only when the waist is of the same opaque fabric as the skirt.

The fitted waist plays an important part in the spring fashions. There is an air of oddness that is attractive about the blouse that sags over the belt, and no effort is made to shorten the waist. There is every indication of a well-defined waistline.

The demand for high military collars is much in evidence. The collars with the high finish in the back and low in front still retain their vogue. The Dutch neck and the flat collar having a square finish in front are also popular. In spite of the strong fashion tendency toward closed neck styles—due to the military influence in women's dress—the V-neck is preferred by many. This is owing—to a great extent—to the V-neck styles of last season having been so attractive that very little improvement in them was found possible. Another factor is that very little change is required in the lines of the V-necks to make them thoroughly in accord with the styles in dresses and suits.

One important feature of the blouses that are being put forth this season is general rather than particular. It is the distinct novelty of the styles. The waist fashions for spring and summer are so different from those of last winter that the latter styles are obviously out of date. It is seldom that such striking changes occur between seasons, but when they do they work to the advantage of the retailer. Blouses are so comparatively inexpensive that the average woman does not hesitate to discard her old ones and buy those in the latest style.

Among some of the many attractive designs that are being shown there are several models that are typical of the trend in blouse styles. One is of crêpe de Chine with box pleats both back and front. The effect is completed by a high collar, long sleeves and finishing straps in front.

Another model is of Georgette crêpe, hand embroidered. The collar rolls softly at the back. The special features are full length sleeves, large armholes and embroidered turned back cuffs. Semi-tailored waists in satin with silk braid binding in harmonious colors are particularly pleasing.

The wide variety of styles in blouses is regarded as favorable by both producers and distributors. In their opinion all the varying factors that have contributed to the making of the present fashion offer an opportunity for a large increase in business for the retailer everywhere, and opportunity such as has not occurred for many years.

White chiffon blouse, vestee of filet lace, which is also used to finish the sleeves.  
From B. Altman & Company



Blouse of white embroidered voile, with high neck, which can be closed if desired. From B. Altman & Co.



Blouse of coffee-colored lace combined with hand-embroidered net in the vest and cuffs. From B. Altman & Company



NO STOCKING IS PROOF AGAINST SHARP TOE-NAILS, HENCE  
PROPER TRIMMING OF THEM IS ESSENTIAL.

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REPRESENT THREE GENERATIONS OF ACCUMULATED EXPERIENCE

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Solid Woven Cotton Machine Belting

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A very important branch of this company's business is the making of suspenders. In addition to manufacturing and selling approximately 350,000 dozen suspenders yearly, it also makes webbing and other suspender manufacturers sufficient for 1,000,000 dozen more. These goods are made to meet every taste and fashion around the world. The better grades are supplied packed in artistic boxes if desired.

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This company makes elastic webs of every variety, including corset webs, braids, and many other high grade and unusual varieties. These webs can be packed in any form to suit customer. For the retail trade Russell webbing is wound on reels and put in glass front cases.

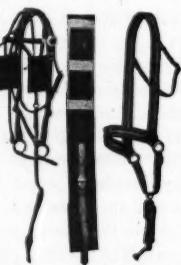
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Among the many varieties of elastic webbing made by this company is garter

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This company makes every kind of harness that can be supplied from cotton webbing, including truck harness standing a test of 5,000 pounds on each trace, fancy harness in brown, white or black; halter and headstalls in white, brown, blue, red, and striped web; and surcingles in every conceivable Cotton Web Bridle, Surcingle and Halter pattern.



Agents wanted for Russell products in every part of the world where we are not already represented.

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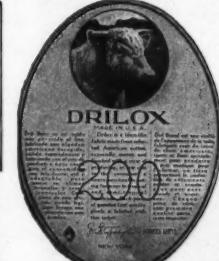
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General Selling Agents of AMERICAN COTTON GOODS, including unbleached sheetings and drills, colored chambrys, ginghams, suiting, denims, khakis, etc.; also the following fabrics made ESPECIALLY FOR EXPORT—ask for these brands



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Toque of white faille silk trimmed with white hackle feathers. From Moorhead & Jardine Company



Dress hat of black hemp straw trimmed with ostrich feathers. From C. M. Phipps, Inc.



Black and white checked faille faced with straw; black velvet bands. From Franklin Simon & Company

## A NEW AMERICAN LINE FOR EXPORT

The United States Becoming a World's Fashion Center for Millinery and its Products Finding International Favor

THE prosperity of the retail merchant, the wholesale distributor and the manufacturer of women's apparel depends in a great degree upon the changes of fashion. The more decided these changes, the larger the demand for new goods. This applies particularly to millinery.

The new millinery styles are as revolutionary as those in suits, dresses and waists. There are such radical differences in sizes and shapes between the hats for the coming spring and summer and those that were fashionable last winter that the wearers cannot make over their old millinery. New hats, shapes and trimmings will have to be purchased. This, of course, will give an unusual impetus to the retail trade everywhere.

In the last six months, due to the same conditions that have affected the dress situation, America has become the great style center in millinery. This has been evidenced by a considerable increase in the volume of exports of this class of merchandise, and by the steady growth of new business. These two factors in themselves indicate the satisfaction of both the retailer and the consumer with the American product.

While there is even a better chance for individuality of design in hats than in gowns, the profusion of new styles that marks the opening of the spring millinery season has one feature that is common to all the hats now in vogue. Shapes are small. The hat fashions, however, conform to the variety of styles that have been accepted in suits and dresses.

Shapes in such wide variety are featured in the new styles that it would require several pages to list and describe all of them. Generally speaking, however, they follow as closely as the dresses do the styles of more than three-quarters of a century ago. One of the most striking of these—which, for the time being, represents the last word in modishness—is patterned after the old-fashioned poke bonnet. This shape is trimmed with quaint floral nosegays combined with narrow ribbon.

Sailor hats of every description are also very popular and are among the leading favorites of the season. They are smaller than they have been for many years. Some of them have slightly curved brims which are given the proper accent by the bandeau. These shapes are susceptible of a wide diversity in trimmings. The style most in vogue, however, has ribbon bands finished with flat bows and streamers which fall over the back or sides of the brim.

Both three and four-cornered hats retain their popularity, but in new effects. Many of the latest shapes are brimless, and in some the brim is cut and bent to suggest a helmet. The military note is most strikingly apparent in some of the extreme types in which angles have been eliminated and which in their shape suggest a submarine. They are appropriately known as "submarines."

Toques and turbans, also ultra small, are much in demand. The severity of outline that was once much in evidence is now broken by means of ridges, dents, points and convolutions which give these shapes a distinction all their own.

These oddly shaped crowns that are a strong feature of the spring styles call attention to the new coiffures, worn high, on which small and medium crowns will perch as in the time of 1850-1860. While this method of posing the hat is dominant, opinion is still unsettled as to whether the hat should be worn at a tilt over the eye, or posed straight over the brow. The latter has the advantage of being somewhat newer in effect.

Straws, naturally, continue much in favor for spring and summer wear, although there is no lessening of the demand for buckram, buckramettes and elastic fabrics and all styles of nets suitable for millinery purposes. In straws

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by large American manufacturers of STOCKINGS and SOCKS, who export large quantities to most countries. Only those having experience and who formerly took indent orders for European stocking manufacturers need apply. State full particulars, names of former manufacturers you represented and previous average annual stocking sales.

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121-123 E 24th St., New York City, U.S.A.

a wide assortment of novelty effects is achieved by combining liseré straw with various dull-finished braids.

Milan and liseré—the latter for its high lustre effect—are used together in many new and striking combinations. Liseré is also employed pleasingly with such materials as satin-finished hemp, tagal picot, and visca or fibre silk braid. Plain milans, however, have not by any means gone out of fashion.

Rough braids are popular, particularly in medium-priced goods. In the new rough effects, chrysanthemum, porcupine and gelatine novelties and high lustre ramie have a wide vogue owing to their lightness and pliability. It is practicable to make small collapsible military turbans out of any of these materials.

Colors have as wide a range as shapes. Among those much in demand are sand shades, battleship gray, dark blue, soft old rose, light brown, black, white and armory blue.

In trimmings stripe effects, plaids, pyroxylin ornaments and various national color combinations are considered particularly smart when applied to hats that are black, white or otherwise contrasting in color.

Flowers and fruits also are much in vogue, the latter holding their own to a surprising degree. Grape effects that were popular last autumn and winter are still well regarded. Tiny berries and hazelnut effects are new. Small, compact ornaments are made from pasted feathers

in wheel, toadstool and thistle motifs. Oddly shaped quills are among the high novelties on some of the most fashionable tailored hats.

Veilings will be a strong factor in the new millinery. Small and medium shapes are adapted to the use of the draped veil effect that is one of the latest things in the arrangement of feminine headgear. Ultra small turbans and sailors are especially effective when combined with the flowing veil. Closely worn veils are much in vogue with the narrow pointed or rolling brims on the small and medium hats.

Veils for close wear are the fine, soft filet, hexagon and hairline meshes decorated here and there with very large black velvet squares or coin spots. In the extreme novelties are the plain mesh veils with the border effect arranged in deep scallops, outlined with chenille or velvet and emphasized by a large ball of chenille placed in each scallop. The parasol veil is still another novelty. It is big and circular and falls in equal ripples on all sides. A border of ribbon combined with velvet dots adds to its striking effect. Hand-run border patterns in great variety are also much in evidence.

In thin veils the mesh of octagon pattern still continues to be popular. It is very light and attractive and gives a certain finish to the toilette. With small hats the "mantilla," a novelty in veiling, is often worn. It is of soft, fine mesh with a small embroidered design.

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"JASHARIS"

## JACOB HARRIS

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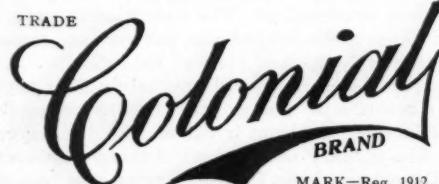
To be represented right means success.

Representation in the right place means success.

The right representative in New York City, which is now becoming the greatest merchandise buying and selling center in the world, is a most important thing to your continued business success. I am prepared to represent you in all lines, both for exporting and importing goods. Specialize in men's and women's wearing apparel of all kinds; Silk, Wool and Cotton Piece Goods. Food-stuffs of all descriptions.

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### Men's Shirts Made of Japanese Silk;

HIGH CLASS PERCALES; TAFFETAS.  
PAJAMAS AND CUFFS, ON ORDER;

Write us for full particulars and information. Excellent opportunity for importers in the West Indies, etc. Just the goods needed and in great variety.  
Made by THE COLONIAL SHIRT CO., Berlin, Ontario, CANADA

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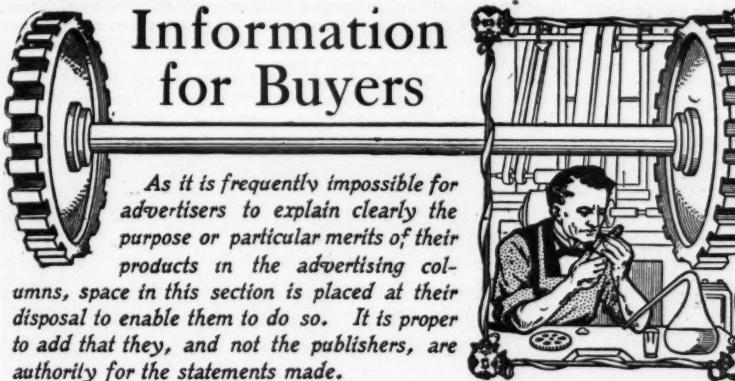
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## A Modern Household Convenience

NEW things for household use are being introduced every day. Some of them are soon discarded because they lack sufficient merit to give them a permanent place, for the average housekeeper is a very exacting person and is not usually disposed to waste money on anything that cannot prove its value. Occasionally, however, something which possesses especially advantageous features makes its appearance and is at once admitted to popular favor. No better endorsement of this statement can be found than in the remarkable increase in the use of paper articles made of vegetable parchment, the introduction of which is of comparatively recent date. Everyone who is induced to try them continues their use because they are clean, economical, strictly sanitary, time-saving and convenient. They are no longer an experiment, for they have proved their value and no up-to-date housekeeper will do without them.

Paper blankets for wrapping up ice in warm weather are already in general use. They prevent the ice from melting and, as they are non-porous and impervious to water, they last for a long time and are much better in every way than cloths, burlaps or newspapers because they do not become musty and no particles can drop from them to clog up the drain pipes. Those who have used paper nursery blankets speak very highly of them for the coolness, comfort and perfect protection they afford. They are so low in cost that they can be destroyed whenever this becomes desirable.

Paper dish cloths are rapidly eliminating the unsanitary dish rag, because they do not absorb grease or water, do their work quickly and easily and leave no lint on the dishes. They are also splendid for washing cut glass and fine china, and a simple rinsing makes them perfectly clean. Vegetable parchment paper is used for many other purposes in the home—for the lining of shelves, closets, bread and cake boxes; for wrapping up left-over portions of food; for covering jellies and preserves, the sanitary qualities of the paper preventing mould from forming on the top; for lining cake tins, etc.; and for wrapping up butter, as it prevents it from absorbing odors from any other food that may be in the refrigerator. In fact, this vegetable parchment is being put to new uses every day and is steadily becoming more firmly established in popular favor.

Merchants desiring to handle a quick-selling and very profitable article should write at once to the manufacturers, the Kalamazoo Vegetable Parchment Company, Kalamazoo, Mich., U. S. A., for prices and further details regarding their product.



*A package of  
Parchment Paper*

## A Modern Office Necessity

IS the elimination of the shorthand method of dictating and transcribing correspondence in sight? This question only a few years ago would have been looked upon as too absurd to require an answer; yet to-day many business men regard the elimination of shorthand as not only possible, but highly probable.



*Shorthand strains the stenographer's nerves and eyes and is easily misread*

This situation has been brought about by the introduction of the Dictaphone, an adaptation of the phonograph to commercial needs. Its advantages are so numerous that it is rapidly coming into general use, and it is a



*"Now what was I going to say? What was that idea I had a moment ago?"*

significant fact that when once employed it becomes quite indispensable to the busy man. Many men are so constituted that they cannot dictate to their own satisfaction to a second person. They feel that they can do much better work and express themselves far more clearly if they are alone. There are others who can dictate splendidly if allowed to proceed without interruption, but a question by the stenographer disarranges their ideas and they resume the thread of their discourse with difficulty.

To these men the advent of the Dictaphone is a veritable boon, for they now can have at their elbow, ready at all times, a machine

into which they can talk with the satisfaction of knowing that whatever they say will be reproduced with absolute fidelity. The annoyance of waiting for a stenographer is eliminated, as is the danger that she may make a mistake in her notes. The machine will repeat the dictation so the person dictating can know exactly what he has said. This, however, is only one of the minor advantages of this wonderful device. Far more important is the time saved by the busy man, for no matter how fast he may dictate the Dictaphone will record every word accurately. There is



*"I'll get it on the Dictaphone before it slips my mind—just press the button and talk"*

no waiting for the stenographer to catch up, and there are no questions or requests for repetition to interrupt the train of thought. In addition, the fact that a letter can be dictated at any moment, at the exact time when the mind is concentrated upon the subject, and be transcribed whenever convenient, is a great advantage. Another factor that exerts a substantial influence in extending the use of the Dictaphone is its economy, especially in large establishments where a number of stenographers are employed. The time saved by the elimination of taking dictation enables them to do at least twice as much work in getting out the letters.

The Dictaphone, however, is not intended exclusively for large offices. It is quite as suitable for small concerns or those of moderate size. The regular model is a combination dictating and reproducing machine oper-



*"That's just the way to word it to get the business—naturally, clearly, forcefully"*

ated by an electric motor. It can also be obtained with a spring motor that will run for half an hour without rewinding, for use where electric current is not available. The cylinders which take the dictation cost but little, and by means of a special shaving machine they can be re-surfaced from 100 to 125 times, so that each cylinder has a capacity of \$00 to 1,000 one-page business letters of ordinary length.

Every office manager or business man wishing to reduce the cost of his correspondence, to say nothing of improving its quality, will find it profitable to communicate with The Dictaphone, Suite 1310A, Woolworth Building, New York City, U. S. A., for full particulars and export prices on this interesting labor and time-saving device.

*The Dictaphone is one of the greatest aids to office efficiency that ever has been developed*



### New Export Department Head

After successfully conducting a general export business for the past eight years, Ray V. Warman is now exclusively associated with the Scripps Motor Co., Detroit, Mich., U. S. A. Mr. Warman has managed the export department of this concern since its inception in 1907 and the sales have increased to such an extent that his entire time was needed, instead of dividing it among several manufacturers as formerly. Mr. Warman is on the board of directors of the Scripps Motor Co., and is also secretary of the company.

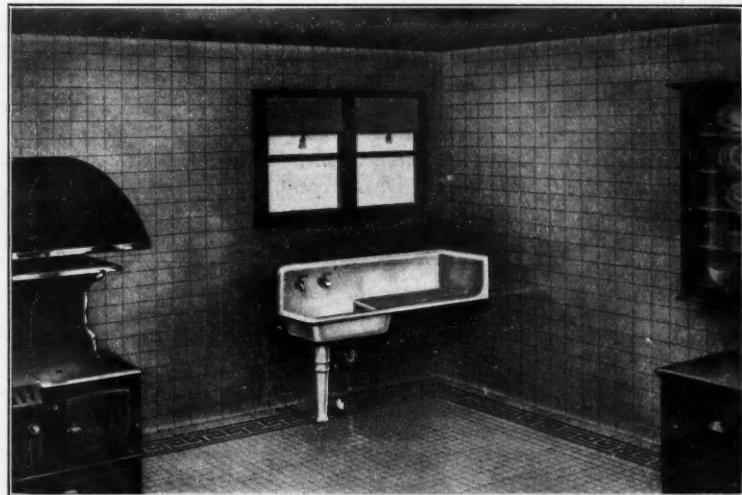
### The Increasing Use of Mosaics

MOSAIC work is one of the earliest forms of art and in the beginning consisted in the fitting together in various patterns of many small pieces of different colored marble, glass and other substances. The earliest specimens of this work were usually confined to the ornamentation of jewelry or furniture, and in occasional rare instances to the more or less elaborate decoration of a temple or other public building. Some of the productions of the workman of thousands of years ago, which are among the treasures of our museums today, are of remarkable beauty and cause us to marvel at the infinite patience and skill that must have been necessary to secure such wonderful results.

Another mosaic that was used by the ancient Egyptians was made entirely of glass, the method pursued being to arrange sticks of different colored glass in such a way that the ends represented the outline of the bird or other figure it was designed to reproduce. These glass sticks were fastened tightly and heated until they melted together and then the whole thick rod, softened by the fire, was drawn out to the required size. A slice of the rod was then cut off and the faces polished, and as the relative positions of the colored glass were not changed the design appeared with microscopic minuteness and astonishing delicacy and refinement.

kitchens, bathrooms, hospitals, cafés and other places where there is much travel or where cleanliness is an absolute necessity. At one time the cost of mosaic tiling was prohibitive to all except the wealthy, because the work could only be done by experienced and

with these blocks will adhere to wood, stone, concrete or any other substance, so that they can be put in place by even the most inexperienced person. These blocks have been used with great success in fitting up restaurants, hotels, cafés, bathrooms, etc., and are as sani-



*Mosaic tiling is easy to install and so moderate in cost that it is being used in kitchens, making the walls both sanitary and attractive*

high-priced laborers. So much attention, however, has been given in this department of industry to simplifying the installation and reducing the price of the material that to-day mosaic tiling is available to persons in very moderate circumstances.

One of the most popular forms of mosaic for floors or walls in use at the present time consists of small tiles made in various small geometric shapes that can be fitted together in attractive designs and embedded in Portland cement. The work can be done by any workman and the result is pleasing to the

tary and attractive as if they were laid in cement.

Those desiring to learn more regarding this material should write The Mosaic Tile Company, Export Dept. D, 30 West 24th Street, New York, U. S. A., for a copy of their catalogue containing prices and a number of illustrations in natural colors of mosaic flooring and walls.

### An Export Bureau for Western Manufacturers

THE appearance in the world's markets of a great many manufacturers situated in the western or inland parts of the United States, especially those from Wisconsin, is largely due to the Foreign Trade Bureau, 309-10 Wells Bldg., Milwaukee, Wis., U. S. A.

Among the clients of this concern is the Sternberg Manufacturing Co., builders of motor trucks, who claim that their trucks represent the highest achievement in construction, workmanship and material, and that they will stand the most severe tests that may be imposed on them. Sternberg trucks are in use all over the world, and climatic conditions seem to have had no effects on their mechanism. The growing popularity and demand for these trucks is the best evidence of their appreciation and recognition in foreign countries and the manufacturers expect their exports in 1915 to exceed those of former years.

Another firm represented by the Foreign Trade Bureau is the Milwaukee Ice Machine Co., whose products recently have found a wide market in many of the Latin-American Republics. This low-priced machine produces refrigeration as well as manufactures ice at a minimum cost and is extremely simple in construction and operation.

Latin-America still uses a large number of bicycles. A small contrivance, manufactured by the A. O. Smith Co. of Milwaukee, which can be attached to any bicycle, changes it immediately into a motorcycle. Simple in construction, durable and exceedingly convenient, this little machine will soon be seen on the streets of many Latin-American cities.

The Patel Paint Co. and the Milwaukee Corrugated Iron Co. are also represented by the Foreign Trade Bureau, to which inquiries should be addressed regarding any of the products mentioned.



*Showing how mosaic tiling of a beautiful design is used in a hotel corridor, enhancing the beauty of the general decorative effect*

Within recent years, however, mosaic work has been generally of a more purely utilitarian nature, it having been found that its decorative possibilities, sanitary qualities and durability render it a peculiarly desirable material for walls, floors, etc., especially in halls,

eye and meets the most exacting sanitary requirements at a moderate expenditure. Another form comprises a selection of these tiles ready mounted on blocks of plastic material about five-eighths of an inch thick and one foot square. The cement that comes

## Distinctive Styles in Suits and Mantles

THE tailored suit of American design and manufacture is the favorite, the world over, among women of taste and fashion, not only because of its distinction in style, but also owing to the thoroughness and excellence of its workmanship and the superiority of its finish. It is made not merely to sell, but to wear.

Specialization in every department enables such garments to be produced and sold at

Still another is a lady's suit of fine all-wool poplin, which comes in the same colors as the Barathea cloth, just described. The collar and belt are trimmed with fancy silk—the latter with self-colored buttons. The coat is lined with self-color silk peau de cygne and trimmed with large buttons of self material. The new style flare skirt is shirred at the top and has box pleats at the sides. The trade price is \$18.50 net.

These are but two of the many models manufactured by Max Lachman & Son, Inc., 22-26 West 32d Street, New York City, U. S. A., who specialize on distinctive styles



*Suit of the new barathea cloth, one of the latest fabrics of the season. Note the skirt with the fashionable flare effect, yoke top and small pleats at the side*

extremely moderate prices. From the ateliers where the suits are designed, to the last workroom where they receive their finishing touches, the best talent is employed to attain the desired result—the complete satisfaction of the wearer.

One of the new models that is especially attractive is made in Barathea cloth. This is a fabric that is among the latest novelties for ladies' suits. In colors it comes in sand, putty, green, Hague blue, navy and black. The collar and the fancy cuffs are trimmed with Grecian effect silk. There is a fancy leather belt and a fancy jeweled buckle. The coat is lined with all-silk peau de cygne and trimmed with buttons of Barathea cloth. The skirt is made in the new flare effect, with a yoke top and small pleats at the side. The style, fit, finish and material are a combination of the latest and best. It is priced to the trade at \$20 net.

in ladies' and misses' suits and mantles made in all the most fashionable and seasonable materials. They desire to grant exclusive territory to importers of women's wear who have facilities for selling to the retail trade. Those interested should address the firm as above.

## Cameras and Photo Supplies

BOTH the amateur camera-man and the professional photographer will be interested in the extensive line of cameras, photographic supplies and apparatus offered by Burke & James, Inc., 240-258 E. Ontario Street, Chicago, Ill., U. S. A. This firm handle everything which the photographer could desire, including a large assortment of their Ingento Cameras, lenses and shutters and all the apparatus necessary for developing and printing.

In view of the large demand for an efficient daylight loading, roll film camera at a moderate price, this concern have constructed the Ingento Junior Cameras, and believe that they are especially adapted to meet all the requirements of a camera of that type. In general characteristics all the Ingento models are identical. They are constructed to open vertically and are fully rounded, giving them an attractive appearance and adding to the ease with which they can be slipped into the pocket. The body of the camera is made almost wholly of reinforced aluminum, black enameled, and the wearing parts are of brass, nickel plated and polished. These cameras are covered with triple coated karatol which this concern state is made expressly for them and

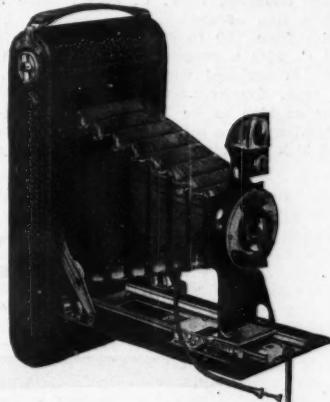


*"Cub" cameras make sharp and brilliant pictures; require no focusing; any boy or girl can use them successfully*

is far superior to the cheaper grades of leather. Another distinctive feature of the Ingento Junior is the secure locking back which cannot come off through a sudden jar. Either a tested universal focus achromatic meniscus lens or a double rapid rectilinear lens is supplied with each camera.

In addition to its complete assortment of cameras, this concern especially recommend a new developing paper known as "Rexo," which can be safely printed and developed without a dark room. It produces, the makers claim, excellent prints because of its great latitude in exposure. This paper is made in three grades in order to insure good results from all classes of negatives. "Rexo" hard is made for thin, weak negatives, "Rexo" normal for the average negative, and "Rexo" soft for hard negatives.

A complete line of inexpensive box cameras is manufactured by this concern in addition to the folding cameras mentioned above.



*With the simple and easily operated Ingento camera amateurs produce pictures of artistic and technical excellence*

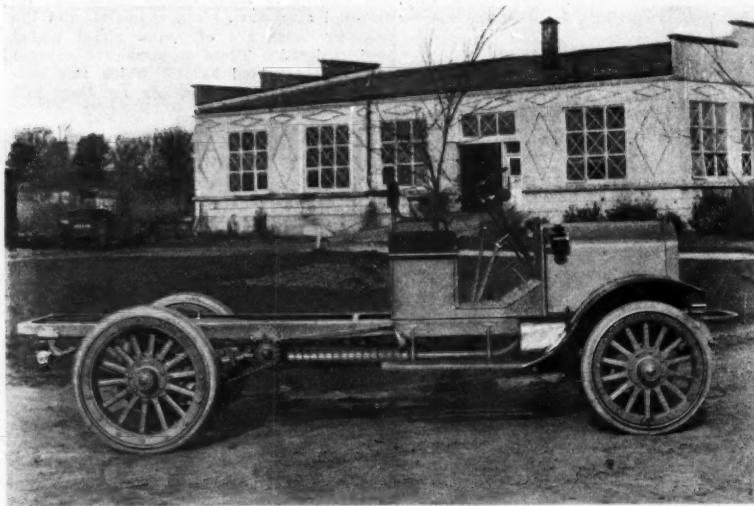
All persons interested in any branch of photography should write to the address above and catalogues and full particulars will be gladly sent.

### A Serviceable Motor Truck

**M**ANUFACTURERS of motor trucks throughout the United States agree that the international market for American-made trucks will be unprecedented at the close of the present war. This belief is based on the fact that the present supply of motor trucks in Europe is being destroyed with great rapidity, while European truck

or an overheated engine. The Dart brakes—both the emergency, which is internal expanding, and the service, which is externally contracting—are of the self-intensifying type. The wheelbase of Model C is 130 inches, the tread 56 inches, length of chassis over all 195½ inches, width 71 inches and length from the driver's seat to the end of frame 101½ inches.

In addition to the Model C truck this con-



*A Dart motor truck chassis, attractive in outline, durable and dependable, that is adapted to a wide variety of uses*

makers have been forced to curtail their output and will be unable to supply the demand at the close of the war. In view of this situation the American truck manufacturers will be called on to supply a large number of motor trucks for countries all over the world.

The demand for trucks of light and medium capacity should be especially heavy because of the increasing use of these types in many lines. Motor truck users are realizing that it is frequently more economical to have light or medium weight trucks, which can make frequent and rapid trips and be loaded to their full capacity most of the time, than to incur the expense of running a heavy vehicle with a load below its full capacity.

The Dart Motor Truck Co., 14 Ainsborough Avenue, Waterloo, Iowa, U. S. A., make a complete line of motor trucks ranging in capacity from 750 to 4,000 pounds. Their Model C, with a capacity of 3,000 to 4,000 pounds, is equipped with a high power, L-head type, four-cylinder engine which develops as high as 40 H.P. The high tension ignition has a set spark which prevents a back-kick on starting, and the Stromberg

carern make a Model A with a capacity of 750 to 1,000 pounds and a Model B with a capacity of 1,500 to 2,000 pounds. The makers state that many coal and lumber dealers, wholesale grocers, plumbers and manufacturers use the Dart trucks and that a number have been exported to New Zealand, Peru, Japan, Hawaiian Islands, South Africa and Porto Rico. For further particulars address this concern as above.

### Correct Styles in Whips

**F**EW persons realize the immense variety of whips manufactured, or appreciate the importance of proper design and durability in this article of universal use. Styles in whips are as numerous as the purposes for which they are employed, and the prices cover almost as wide a range. There is, for instance, the straight-handled whip, with a short lash, used for ordinary carriage or wagon driving; then comes the drop (or French) top whip, with handles of moderate length and lashes from 1½ to 3 feet long, which are favored by some drivers for their durability and attractive appearance; other

made generally of the last. The handles are made of an almost endless assortment of woods, metals, ivory, celluloid, leather, etc. When the whips, or portions of them, are covered, silk is generally used for the more expensive, but for general purposes linen or cotton give excellent service. As an illustration of the range of prices in which whips are made by a leading American manufacturer it may be stated that in their list can be found an attractive well-made article that can be retailed at a very good profit for 25 cents, while the best whips cost \$100 or more.

The Binghamton Whip Company, 70-80 Whitney Street, Binghamton, N. Y., U. S. A.,



*"Chester Line" rawhide straight carriage whips are popular*

wish to place in the hands of every merchant handling goods of the above class a copy of their latest catalogue, in which will be found illustrations and specifications of their extensive line of whips, together with prices and other information. Included in the latter are tables of weights and measures, rates of exchange and other items useful to importers. Copies of this catalogue will be sent to any part of the world upon receipt of name and address.

### A High-Grade White Enamel

**W**HITE has always been very popular for interior decorations. Old-fashioned houses used it almost entirely. To-day, although it is not used alone to such a large extent as formerly and is considered more effective in combination with other tints, it is seldom entirely omitted from any plan of home adornment. Paint does not give as good results in this kind of work as enamel. It wears rough, is hard to clean and has to be frequently renewed. On the other hand,

"Kyanize" white enamel, the makers state, gives a beautiful, permanent white surface, dull or glossy, as desired, cleans easily and wears indefinitely. This white enamel, which is made by the Boston Varnish Co., Everett Station, Boston, Mass., U. S. A., is put up in a new and striking square bucket package, with a blue and gold label. It is the policy of this concern to put their products in novel and



*The new square package for "Kyanize" white enamel*



*A rattan drop (or French) top whip that has an extra heavy loaded stock*



*The "Parlor City Rawhide" is special undercovered, waterproof and loaded*

1¼-inch carburetor is made tamper-proof by being set at the factory, with the exception of the air adjustment. Both the lubricating and cooling systems on the Dart engine are made so as to prevent the expense and inconvenience of a burnt out bearing

styles include riding whips, cab whips, dog whips, express whips, wagon whips, stage whips, quirts, etc., etc.

The principal materials entering into the construction of a good whip are whalebone, rawhide and rattan, the cheaper sorts being

distinctive packages so that the shape of the can will be remembered if the name of the product should be forgotten. This concern welcome inquiries on matters of home decoration and will reply promptly to any requests.

### The Modern Refrigerator

IT is natural, considering the fact that the universal use of ice is a peculiarly American custom, that most of the improvements in refrigeration have originated in the United States. At first the devices for preserving the ice were of very simple construction, and fully merited the name of "ice-box" by which they were known. In fact, they were little more than two ordinary wooden



This refrigerator is made of solid ash, with golden oak finish, and holds 60 pounds of ice. Weight, 210 pounds.

boxes, one inside the other, with the space between filled with sawdust or other insulating material. No more can be said about them than that they were better than nothing. Constant effort and endless experiments, however, finally evolved the modern refrigerator, which apparently leaves nothing to be desired as it fulfills in every way the purpose for which it was designed. It is attractive in appearance and is made in an immense variety of styles, sizes and prices, and no matter how cheap the one selected may be it is practically certain to possess the absolutely necessary requirement



Note this refrigerator's exceptionally compact arrangement. Shipping weight, 229 pounds; ice capacity, 60 pounds.

—that of perfect insulation. This means that the maximum service will be obtained from the ice used and that the food will be kept cool and in good condition as long as the ice lasts.

The Illinois Refrigerator Co., of Morrison, Ill., U. S. A., is desirous of calling the attention of merchants and others interested in merchandise of this class to the merits of their "Automatic" refrigerators, which, they state, possess a number of very advantageous features. These refrigerators are

made in a very great variety of styles and sizes, from the modest low-priced article suitable for the smallest family, to the large ornate design for the use of butchers, grocers, delicatessen stores, etc. The company has prepared an unusually handsome catalogue containing many illustrations, prices, specifications and other particulars regarding their product, and upon request will be pleased to mail a copy to any address in the world without charge.

By addressing the Signal Motor Truck Co., Detroit, Mich., U. S. A., full data regarding their products can be secured.

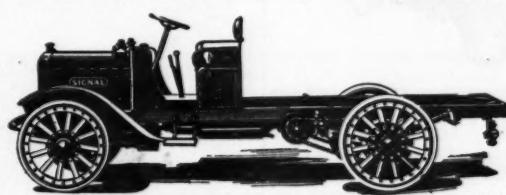
### Simplified Photography

IN the minds of most persons the subject of photography is generally associated with dark rooms, mysterious chemicals and delicate apparatus requiring an extended experience to



The one-minute tintype and postcard camera is a complete studio in itself.

understand and properly manipulate. In the early stages of the art the work of the photographer was doubtless far from easy and the productions of the novice anything but satisfactory. The improvements that have been



This one-ton, Model F truck chassis is adapted to an unusual variety of uses within its capacity.

hour, but may be increased for special service.

The Model H Signal motor truck has a capacity of  $1\frac{1}{2}$  tons, and is made with worm drive only. Like the smaller model, this truck is made with a long or short chassis and a 144-inch or 120-inch wheelbase. The former can turn between curbs in a street 37 feet wide and the latter in a 35-foot street. The short chassis weighs only 3,600 pounds and the long chassis 3,700 pounds.

A 27-H.P. Continental motor is used in the two-ton Model J truck, which is made with worm drive only. The wheelbase is 148 inches, with front tread 56 inches and rear tread 58 inches. This model weighs 3,900 pounds and has ample loading space. The length of the frame behind the seat is 120 inches, the width 34 inches and the clear space between the rear wheels 52 inches.

The worm drive Model M three-ton Signal truck is driven by a 40-H.P. Continental motor. The standard wheelbase is 144 inches and the truck will turn in a 50-foot circle. The weight of the chassis only is 6,100 pounds. The dimensions of the standard chassis are: length over all 19 feet, 5 inches; width 7 feet, 2 inches; the long chassis: 21 feet, 5 inches length, and 7 feet, 2 inches width.

All four of these Signal motor trucks have Elsemann high tension, fixed spark magneto; Stromberg truck type carburetors; two sets of brakes on the rear wheels—one a contracting service brake, and the other an expanding emergency brake; Timken axles and bearings; Gemmer steering gears and Detroit self-lubricating springs. The standard equipment includes driver's seat, front fenders with aprons and steps, oil side and tall lamps, horn and set of tools.

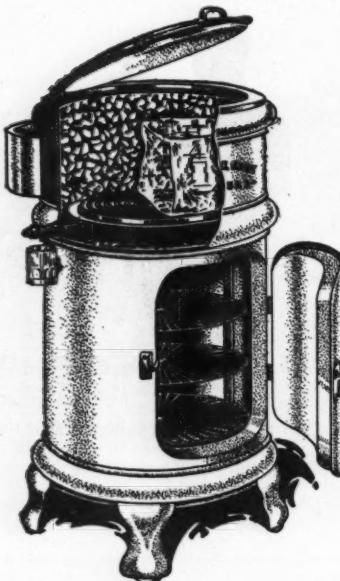
introduced within the last few years, however, in the way of cameras, paper, films, developers, etc., have been so great that practically anyone, without any experience whatever, can now produce much better pictures than the professional photographer of two or three decades ago. To-day almost any person can undertake work of this nature and be certain of success.

One department in which especially notable progress has been made is what is known as "automatic photography," so-called because machines have been devised that contain within themselves a complete studio—camera, dark room, chemicals and other supplies, all combined in compact, portable and convenient shape—ready for immediate use in the house or street or any other place where the picture is taken. These machines are made in a number of different styles and sell at an extremely low price considering the work which they are capable of producing. One of them, for instance, will take pictures on all sizes of tintypes and cards, ranging from the smallest,  $1\frac{1}{4} \times 2\frac{1}{2}$  to  $3 \times 4\frac{1}{2}$  inches, while a special equipment enables the operator to take portraits to be mounted in the ever-popular button or in small metallic frames. The outfit that comes with this machine comprises everything needed to make a fine photograph, and includes supplies sufficient for 500 pictures. It is especially desirable for those who wish to make a business of taking pictures at fairs, conventions or other public or semi-public gatherings, its great rapidity and its superior work rendering it very profitable to the owner.

The New York Ferotype Company, Department 107, 168 Delancey Street, New York City, U. S. A., will send free on request a catalogue containing a large amount of information of interest to those persons wishing to learn more about this "automatic" photography.

### Refrigerators for Every Climate

NOW that the invention of artificial ice-making plants has made the cheap and rapid production of ice possible in all parts of the world, and its use for domestic purposes is becoming general, the installation of an efficient and durable refrigerator has become a matter of great importance. Of



*The interior parts of these refrigerators can be removed or replaced in one minute*

course, the first requirement in an article of this kind is that it be so constructed that it will preserve the ice for the longest possible time and as this can only be done by a scientific system of insulation every manufacturer gives special attention to this



*This sectional view shows the general construction, insulation and circulation*

feature. It is natural that those makers whose products have acquired a reputation for quality should use the most expensive material and exercise the greatest care in design and construction, for they realize that a poorly built refrigerator not only

permits the rapid melting of the ice, but is liable to cause the food to become contaminated through improper ventilation.

Durability is another important consideration. The makers of the "White Frost" refrigerator state that it is entirely built of metal, and is therefore exceptionally durable, for it is weather proof, damp proof, heat proof, insect proof and is not easily injured.

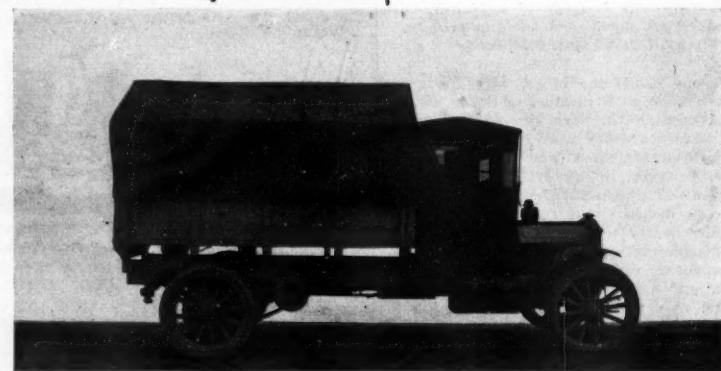
This improved metal refrigerator is made of thick Bessemer steel sheets, heavily coated with zinc, which, after being pressed into shape, are covered with thoroughly baked-on white enamel. The circular shape in which these refrigerators are made is a decided advantage, because the fact that there are no corners or joints renders them extremely easy to keep clean. The cover can be raised and all shelves removed and washed with hot or cold water. The shelves, which are circular in shape, to conform with the refrigerator, can be raised and lowered as may be desired, and an additional convenience is that they revolve on a pivot, so that every article can be reached without the least trouble. The walls are so arranged that there is an air space of  $1\frac{1}{4}$  inches between the inner and outer surface, and this is packed with the finest grade of granulated cork, which is claimed by experts to be the best material known for insulating purposes. The attractive appearance of these refrigerators is enhanced by the substantial char-

The Federal army truck that is shown in the illustration accompanying this article meets all these requirements. A large number of these trucks have been sold to foreign countries and have satisfactorily stood the tests of active military use. Still more are being employed commercially, not only in the United States, but in various parts of the world.

The army truck in question has a capacity of two tons. Its dimensions are: wheelbase, 144 inches; length of body (maximum) 126 inches; height of body inside of tarpaulin, 60 inches; width inside (maximum) 60 inches; height of panel, 20 inches. It is priced, complete with body and tarpaulin and top over driver's seat, at \$2,495 boxed for export and delivered to vessel at New York City.

The Federal Motor Company has specialized on  $1\frac{1}{2}$ -ton trucks. The chassis weight of a vehicle of this type is 3,850 pounds; the motor is a 4-cylinder mono-bloc; the horsepower 30, and the speed of the car 15 miles per hour.

These trucks are now in use in hundreds of different lines of business. Many manufacturers of automobiles—the keenest judges of such things—have purchased a large number of them for transportation and delivery use. Federal trucks are as widely distributed geographically as they are industrially. Outside the United States they have a steadily increasing sale in the principal countries of



*The Federal army truck gets over the ground quickly, operates economically and has ample power to draw heavy trailers*

acter of the trimmings—all locks, hinges and handles being made of brass, highly polished and heavily nickel-plated. The sanitary water cooler, that forms part of the equipment of several of the models, is porcelain covered, inside and out, and as the water never touches the ice, it is always kept cool and pleasant to drink without danger of contamination.

Further particulars and prices can be obtained by any interested person by writing to The White Frost Refrigerator Co., Division 17, Export Department, 15-25 Whitehall Street, New York City, U. S. A.

### Adaptable and Efficient Motor Trucks

MOTOR trucks for military use must be at the acme of efficiency. They must be as strong as possible, but not too heavy. Their mechanism must be simple and not easily disarranged. They must be able to withstand the relentless strain of war until they are destroyed. It naturally follows that a vehicle that will meet these severe requirements on the battlefield will prove especially desirable for commercial purposes where the demands are no less rigid although the conditions of operation are not so unusual.

the globe. Among the large users are individuals, commercial and industrial enterprises in England, Japan, Porto Rico, Venezuela, Ecuador, Spain, India, Cuba, Australia, Colombia, Holland, Argentina, Portugal, Mexico and the Philippines.

A request addressed to the Federal Motor Truck Company, Detroit, Michigan, U. S. A., will bring illustrated literature regarding these vehicles. Dealers will find these trucks well worth looking into.

### Prices of Copper

THE Rome Wire Company, manufacturers of all kinds of bare and insulated electrical wires, whose works are located at Rome, N. Y., U. S. A., announce that they have ready for gratuitous distribution a leaflet to which they have given the title "Copper History, (as Told in Prices)." Included therein will be found the monthly average price of copper at New York for every year since 1884, and also the yearly average since that date. The tables given will be found useful and interesting to all users of copper as well as extremely valuable as a means of comparing current values with those of former years. Copies will be sent without charge to anyone applying to the company at the above address.

## Increasing Use of White Portland Cement

**P**ORTLAND cement is universally acknowledged to be one of the best of building materials because of its strength, durability, ease of manipulation and economy, but



Facsimile of the "Medusa" trademark

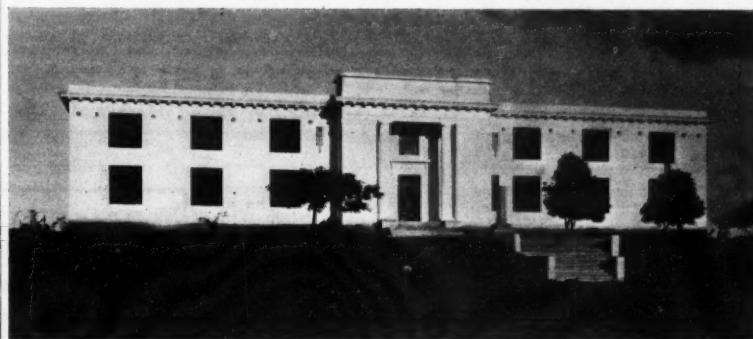
in many directions its employment has been circumscribed because of its somewhat unattractive and monotonous color. This objection, however, has been now removed by the introduction of a true Portland cement that not only gives a pure white finish, but possesses all the strength and other good qualities of the ordinary gray cement. That the improved material represents a great advance and offers many advantages to the architect is clearly shown by the remarkable increase in its use in buildings of the better class and the higher grades of ornamental work in widely separated parts of the world.

White Portland cement is used in exactly the same way as ordinary cement, except that when white concrete or white artificial stone is desired it must be mixed with some white substance, such as white sand, crushed white quartz, marble or limestone. Mixed with water it can be used as a stucco, or

for giving a white exterior finish to buildings, and is unexcelled for steps, railings, columns, doorways, window casings, cornices or panels. Many architects prefer it to anything else for interior purposes, using it for stairways, wainscoting, panels, reliefs and floors, its decorative possibilities being practically unlimited because it can be given any tint or color that may be desired.

Another field in which it is making steady headway is that of monumental and cemetery work, wonderfully artistic results being secured at a moderate cost in the way of

other public places. It can also be used as a paint for covering iron work or the surface of ordinary cement, and as it is absolutely stainless it has no superior for pointing up joints and seams between blocks or slabs of marble, tile, limestone, brick, granite or other substances. In fact, Medusa White Portland Cement, as the improved article is called by the manufacturers, can be successfully used for so many different purposes that a complete list cannot be given here, and therefore those desiring further information should write to the Sandusky



"Medusa" white Portland cement was used for the entire exterior finish of this handsome memorial hall of the University of Porto Rico, Rio Piedras, P. R.

vaults, monuments, columns, urns and headstones, while municipal authorities and landscape gardeners are using it more and more for fountains, seats, railings, balustrades, steps, curbing, walks, gateways, etc., in parks and

Portland Cement Company, Sandusky, Ohio, U. S. A., for a copy of their latest catalogue, giving many illustrations of important buildings and other work in which it has been used.

## The Famous MAIMIN Electric Cloth Cutting Machine

Covered by United States and Foreign Patents

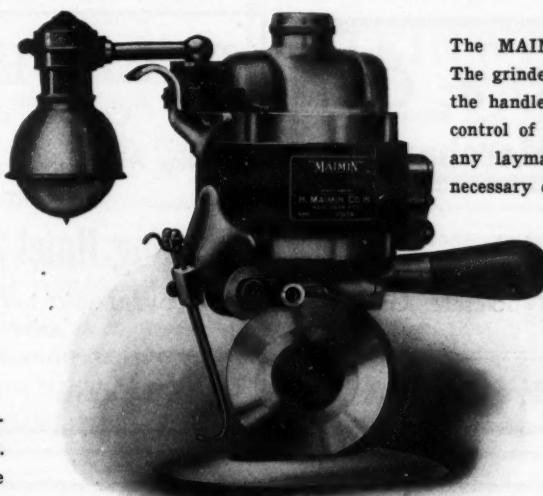
Simple in Construction; Easy to Operate; Great Time Saver.

The MAIMIN is considered the most perfect cloth cutter on the market

The MAIMIN is the only cloth-cutting machine with the grinder inside of the safety guard and directly under the motor. This is one of our specially patented features.

Size: 11 inches high,  
4 3-4 inches wide.

Weight of machine, fully equipped for operation, 16 lbs. 6 ozs. Mention whether you desire direct or alternating current.



MAIMIN No. 6. 16-6

This is a Great Opportunity for Importers

The MAIMIN machine sells on sight. Why not write us AT ONCE for particulars? We will grant exclusive territories to responsible firms.

**H. MAIMIN CO., Inc., 64 University Place, New York City, U. S. A.**

The MAIMIN is absolutely dustproof. The grinder is controlled by a trigger at the handle, which is always under the control of the operator. It is so simple any layman can operate it. No tools necessary except one key.

**PRICE, f. o. b.  
NEW YORK,  
\$157.50, Gold.**

We will be pleased to send a complete catalog describing our machines in detail to any interested firms.

## THE KALAMAZOO VEGETABLE PARCHMENT CO.

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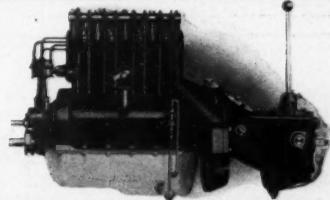
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